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**DEPARTMENT OF DEFENSE  
IN-HOUSE RDT&E ACTIVITIES**



**30 October 1972**

**Management Analysis Report . . .**

**Department of the Army**

**Department of the Navy**

**Department of the Air Force**

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6 DEPARTMENT OF DEFENSE IN-HOUSE RDT&E ACTIVITIES.  
 10 Harold F. Davidson  
 11 30 October 1972  
 12 143p.

9 Management + Analysis rept.

Office of the Chief of Research and Development  
 Department of the Army  
 Washington, D.C. 20310

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FOREWORD

For this report

This report was prepared by the Department of the Army at the request of the Director of Defense Research and Engineering. The Departments of the Army, the Navy and the Air Force provided comprehensive data on the finances, manpower and facilities of their organizations that perform research, development, test and evaluation (RDT&E). In addition, they briefly described each activity's mission, current important programs, functions, and equipment capabilities. The statistical data relate to the past and current fiscal years, i.e. 1972 and 1973.

Each in-house RDT&E activity of the Department of Defense is described on one page in this compilation. The data for FY 1972 are summarized in tables preceding the main text.

This edition is the seventh of a series that started in 1966. Information was submitted on key-punched cards, and the report's preparation was thus entirely automated--with some manual correction of typographical errors and clarification of obscure abbreviations and contractions.

All current DoD RDT&E activities are listed in the Contents alphabetically within each Department. Some new organizational names appear in this issue and others have been changed since last year; for this information, see Appendix 1.

Appendix 11 contains the definitions given in DoD Instruction 7700.9 and employed as the basis for these data. Appendix 111 lists selected standard abbreviations and acronyms.

Thanks are extended to Mr. Donald J. Ertel, Officer, Chief of Research and Development, Department of the Army, for his unselfish and unstinting assistance in checking the raw data submitted by the Services and to Ms. Marilyn Kurak and Mr. Eugene S. Groseclose, Jr., for coaxing an obstreperous computer into providing an accurate, legible report. Thanks are also due Ms. Cheryl Gellerson for her kind assistance and patience in correcting numerous typographical errors.

<sup>1</sup>Department of the Army letter, "Research and Development Resource Data for In-House RDT&E Activities," dated 18 August 1972.

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SUMMARY

DEPARTMENT OF DEFENSE IN-HOUSE RDT&E FACILITIES

PROGRAM DATA FOR FY 1972

	(MILLIONS)
TOTAL ANNUAL LABORATORY PROGRAM	4379.696
TOTAL INHOUSE PROGRAM	2318.807
TOTAL RDT&E PROGRAM	2848.035
TOTAL INHOUSE RDT&E	1514.803
TOTAL ANNUAL OPERATING COST	585.926

PERSONNEL DATA (END OF FY 1972)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD	TOTAL PROFESSIONALS
MILITARY	26338	1188	8653
CIVILIAN	81628	3071	28881
TOTAL	107966	4259	37534

PHYSICAL FACILITIES (END OF FY 1972)

ACRES	9438879
-------	---------

SPACE (THOUSANDS OF SQ FT)

LABORATORY	28665.763
ADMINISTRATIVE	9573.256
OTHER	53290.477
TOTAL	91529.496

COST (MILLIONS)

REAL PROPERTY	3462.161
EQUIPMENT	3655.879
TOTAL	7118.040

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TABLE 1. ARMY ROTEE ACTIVITIES, PROGRAM AND PERSONNEL DATA, FY 1972

INSTALLATION	FUNDING DATA (MILLIONS \$)			PERSONNEL DATA									
	TOTAL INHOUSE	TOTAL ROTEE	INHOUSE ROTEE	TOTAL CIV	PHD CIV	PHD MIL	PHD CIV	PHD PROF	PHD CIV	PHD PROF	PHD CIV	PHD PROF	PHD CIV
AEROMEDICAL RESEARCH LABORATORY	1.868	1.285	1.285	48	25	17	2	35	4	11	4	11	4
AIR DEFENSE BOARD	7.999	7.999	5.037	342	117	1	0	42	35	11	4	11	4
AIR MOBILITY R&D LABORATORY	43.641	13.458	43.021	12,838	34	575	1	26	34	236	1	236	1
AIRBORNE COMMUNICATIONS & ELECTRONICS BOARD	3.395	3.395	1.488	207	61	0	0	41	8	8	0	41	8
ARCTIC TEST CENTER	4.889	4.059	2.606	321	29	1	0	26	6	6	0	26	6
ARMOR AND ENGINEER BOARD	5.647	5.647	2.186	450	101	0	0	97	1	1	0	97	1
ATMOSPHERIC SCIENCES LABORATORY	12.219	11.034	9.220	463	258	0	1	40	115	115	1	40	115
AVIATION SYSTEMS TEST ACTIVITY	4.478	4.478	3.689	62	116	0	1	23	26	26	1	23	26
AVIATION TEST BOARD	9.540	6.935	6.426	221	133	0	0	44	4	4	0	44	4
AVIONICS LABORATORY	20.956	18.146	12.699	75	251	1	5	14	160	160	1	14	160
BALLISTICS RESEARCH LABORATORIES	30.868	20.928	30.609	20,808	75	879	9	85	62	410	9	85	62
BENET WEAPONS LABORATORY	15.334	13.665	9.891	8,332	3	410	0	43	2	175	0	43	2
COATING AND CHEMICAL LABORATORIES	5.346	1.738	2.899	1,471	5	43	1	2	6	28	1	2	6
COLD REGIONS REE LABORATORIES	7.435	6.198	5.197	4,322	41	248	2	22	36	84	2	22	36
COMBAT SURVEILLANCE & TGT ACQUISITION LABS	31.000	13.500	33.000	13,500	23	312	1	6	23	172	1	6	23
COMMUNICATIONS ADP LABORATORY	31.700	14.100	31.400	13,800	23	420	0	9	12	255	0	9	12
CONSTRUCTION ENGINEERING RESEARCH LABORATORY	6.404	5.069	5.873	4,701	3	168	0	33	4	94	0	33	4
DESERET TEST CENTER (LABS)	15.807	14.817	13.491	12,666	355	887	8	15	117	130	8	15	117
EDGEWOOD ARSENAL LABS	39.080	36.760	30.885	196	1123	61	65	146	537	537	61	65	146
ELECTRONIC PROVING GROUND	14.729	9.685	9.175	358	227	0	2	96	101	101	0	2	96
ELECTRONIC WARFARE LABORATORY	32.560	15.312	32.228	14,980	63	384	0	4	40	191	0	4	40
ELECTRONICS TECHNOLOGY AND DEVICES LAB	22.092	12.933	21.953	13	475	1	55	5	302	302	1	55	5
ENGINEER TOPOGRAPHIC LABORATORIES	13.411	5.800	13.256	5,645	25	265	1	21	12	169	1	21	12
ENGINEER WATERWAYS EXPERIMENT STATION	28.934	22.073	14.451	12,469	58	1197	3	46	42	355	3	46	42
FIELD ARTILLERY BOARD	4.774	4.682	1.466	1,424	388	43	0	103	1	1	0	103	1
FRANKFORD ARSENAL LABS	35.355	26.244	32.135	31	1609	2	38	22	724	724	2	38	22
HARRY DIAMOND LABORATORY	77.763	40.645	45.986	33,530	9	1505	1	61	6	533	1	61	6
HUMAN ENGINEERING LABORATORY	3.629	3.253	3.208	832	30	100	1	16	19	53	1	16	19
INFANTRY BOARD	2.746	2.631	1.294	1,179	184	55	0	0	22	2	0	0	22
INSTITUTE OF DENTAL RESEARCH	1.384	1.384	0.715	0.715	56	25	10	1	30	9	10	1	30
INSTITUTE OF SURGICAL RESEARCH	2.799	2.799	1.335	1,435	127	79	20	3	42	20	20	3	42
LAND WARFARE LABORATORY	8.853	5.262	8.551	4,996	16	111	0	3	14	55	0	3	14
LETTERMAN ARMY INSTITUTE OF RESEARCH	33.682	15.257	27.293	13,173	90	220	19	2	50	10	19	2	50
MATERIALS AND MECHANICS RESEARCH CENTER	15.589	8.455	14.044	7,512	13	314	0	65	10	219	0	65	10
MATERIEL SYSTEMS ANALYSIS AGENCY	28.514	25.908	8.770	8,604	99	979	0	1	61	171	0	1	61
MATERIAL TESTING DIRECTORATE	1.025	1.025	0.865	0.865	15	34	0	4	12	15	0	4	12
MEDICAL BIOMECHANICAL RESEARCH LABORATORY	0.949	0.949	0.775	0.775	15	34	0	0	1	3	0	0	1
MEDICAL EQUIPMENT R&D LAB	3.532	3.532	2.424	2,424	119	99	30	12	69	45	30	12	69
MEDICAL RESEARCH AND NUTRITION LAB, FGH	3.255	3.255	1.754	1,754	119	122	17	14	98	36	17	14	98
MEDICAL RESEARCH LABORATORY	0.301	0.301	0.224	0.224	6	0	5	0	7	0	5	0	7
MEDICAL RESEARCH UNIT	0.317	0.317	0.191	0.191	9	8	2	0	5	0	2	0	5
MISSILE RES., DEV. AND ENGINEERING LAB	82.091	37.154	73.792	29,734	31	1196	3	53	34	680	3	53	34
MOBILITY EQUIPMENT R&D CENTER	91.970	27.406	44.745	18,855	54	1370	4	23	34	596	4	23	34
NATICK LABORATORIES	40.281	25.684	23.207	14,968	132	1236	11	50	62	479	11	50	62
NIGHT VISION LABORATORY	32.654	15.727	32.654	15,727	51	409	0	34	35	219	0	34	35
PICATTINNY ARSENAL LABORATORIES	129.900	86.000	99.230	55,300	68	2676	1	62	51	1889	1	62	51
R&D TECHNICAL SUPPORT ACTIVITY	11.419	11.290	11.319	11,290	12	654	0	0	2	101	0	0	2
RESEARCH INSTITUTE OF ENVIRONMENTAL MEDICINE	3.351	3.351	2.600	2,600	71	102	18	20	55	49	18	20	55
RESEARCH INSTITUTE OF INFECTIOUS DISEASES	5.111	5.111	3.040	3,040	365	248	46	19	49	38	46	19	49
ROCK ISLAND ARSENAL LABORATORIES	21.360	13.666	14.717	9,227	9	749	1	19	11	304	1	19	11
RSCB INST FOR BEHAVIORAL AND SOCIAL SCIENCES	8.706	2.340	8.706	2,340	11	130	1	44	9	93	1	44	9
TANK-AUTOMOTIVE COMMAND LABS	78.128	27.551	46.291	16,659	16	989	0	6	19	412	0	6	19
TROPIC TEST CENTER	4.257	4.257	2.792	2,792	126	89	0	4	31	20	0	4	31
WALTER REED ARMY INSTITUTE OF RESEARCH	19.956	19.956	13.691	13,691	546	606	168	120	305	253	168	120	305
WHITE SAND MISSILE RANGE	111.111	91.240	94.021	74,340	1181	3594	6	6	1116	441	6	6	1116
YUMA PROVING GROUND	24.653	24.653	11.508	11,508	456	802	13	0	92	89	13	0	92
TOTALS	1304.907	812.784	978.556	600.727	7897	29310	495	1170	3488	11391	495	1170	3488

\*



TABLE 2. ARMY ROTCE FACILITIES DATA, FY 1972

INSTALLATION	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)	ACRES	LABORATORY	ADMIN	OTHER	COST (MILLIONS \$)	
						REAL PROPERTY	EQUIPMENT
AEROMEDICAL RESEARCH LABORATORY			FT. RUCKER, AL.	5.940	7.470	0.379	2.186
AIR DEFENSE BOARD			EL PASO, TEXAS	36.550	52.724	1.895	11.024
AIR MOBILITY R&D LABORATORY		26	MOUNTAIN VIEW, CAL.	43.308	15.584	1.474	5.446
AIRBORNE COMMUNICATIONS & ELECTRONICS BOARD		108	FT. BRAGG, N.C.	50.879	114.000	4.190	3.090
ARCTIC TEST CENTER		27	FT. GREELY, AK.	20.550	225.847	13.158	6.063
ARMOR AND ENGINEER BOARD		726014	FT. KNOX, KENTUCKY	68.068	166.374	1.419	2.355
ATMOSPHERIC SCIENCES LABORATORY		6900	WHITE SANDS MR., N.M.	0.056	0.033	48.000	2.500
AVIATION SYSTEMS TEST ACTIVITY		45	EDWARDS AFB, CAL.	0.004	0.098	1.140	4.165
AVIATION TEST BOARD		19	FT. RUCKER, AL.	2.440	180.734	2.550	13.185
AVIONICS LABORATORY		1234	EATONTOWN, N.J.	43.500	7.500	2.605	14.900
BALLISTICS RESEARCH LABORATORIES		9	ABERDEEN PROV GR, MD.	113.784	0.000	15.633	34.429
BENET WEAPONS LABORATORY		3380	WATERVLIET, N.Y.	24.600	0.000	2.266	3.842
COATING AND CHEMICAL LABORATORY		4	ABERDEEN PROV GR, MD.	0.017	0.005	0.060	0.410
COLD REGIONS R&E LABORATORIES		631	HANOVER, N.H.	15.013	9.848	3.906	4.383
COMBAT SURVEILLANCE & TGT ACQUISITION LABS		71	FT. MONMOUTH, N.J.	103.535	7.281	2.418	23.000
COMMUNICATIONS ADP LABORATORY		12	FT. MONMOUTH, N.J.	75.305	7.389	0.000	6.987
CONSTRUCTION ENGINEERING RESEARCH LABORATORY		15	URBANA, IL.	68.875	32.075	3.481	1.561
DESERET TEST CENTER (LABS)		840910	DUGWAY, UTAH	85.891	130.051	1743.102	49.608
EDGEWOOD ARSENAL LABS		4055	EDGEWOOD ARSENAL, MD.	496.713	97.329	145.134	16.899
ELECTRONIC WARFARE LABORATORY		19431	FT. HUACHUCA, AR.	0.000	0.000	3.320	27.876
ELECTRONICS TECHNOLOGY AND DEVICES LAB		0	FT. MONMOUTH, N.J.	61.311	40.868	2.525	13.880
ENGINEER TOPOGRAPHIC LABORATORIES		279	FT. MONMOUTH, N.J.	142.900	8.100	5.832	12.482
ENGINEER WATERWAYS EXPERIMENT STATION		0	FT. BELVOIR, VA.	55.899	10.828	0.000	11.677
FIELD ARTILLERY BOARD		2009	VICKSBURG, MISS.	1391.000	338.596	192.133	15.080
FRANKFORD ARSENAL LABS		23	FT. SILL, OK.	26.286	47.135	3.350	2.822
HARRY DIAMOND LABORATORY		43	PHILADELPHIA, PA.	558.000	134.000	557.000	8.891
HUMAN ENGINEERING LABORATORY		2770	WASHINGTON, D.C.	281.502	46.119	54.154	23.299
INFANTRY BOARD		10	ABERDEEN PROV GR, MD.	26.500	17.605	28.933	0.709
INSTITUTE OF DENTAL RESEARCH		14959	FT. BENNING, GA.	0.000	50.053	28.576	0.500
INSTITUTE OF SURGICAL RESEARCH		0	WASHINGTON, D.C.	7.711	4.722	1.425	0.670
LAND WARFARE LABORATORY		1	FT. SAM HOUSTON, TX.	25.424	0.800	1.968	0.568
LETTERMAN ARMY INSTITUTE OF RESEARCH		80	ABERDEEN PROV GR, MD.	38.691	2.655	0.686	0.712
MATERIALS AND MECHANICS RESEARCH CENTER		3	PRESTIDIO, S.F., CAL.	60.102	8.900	0.467	2.670
MATERIEL SYSTEMS ANALYSIS AGENCY		48	WATERTOWN, MASS.	381.778	89.394	203.880	14.417
MATERIEL TESTING DIRECTORATE		4	ABERDEEN PROV GR, MD.	8.700	36.500	3.000	0.360
MEDICAL BIOMECHANICAL RESEARCH LABORATORY		6750	ABERDEEN PROV GR, MD.	1220.000	429.000	227.000	92.000
MEDICAL EQUIPMENT R&D LAB		0	WASHINGTON, D.C.	11.453	1.022	0.976	0.410
MEDICAL RESEARCH AND NUTRITION LAB, FGH		0	FT. TOTTEN, N.Y.	21.523	9.081	0.444	0.444
MEDICAL RESEARCH UNIT		2	DENVER, CO.	83.663	5.138	5.079	3.375
MEDICAL RESEARCH UNIT		20	FT. KNOX, KY.	88.025	5.368	0.280	3.072
MISSILE RES. DEV. AND ENGINEERING LAB		15	KUALA LUMPUR, MALAYSIA	5.000	0.600	0.100	0.222
MOBILITY EQUIPMENT R&D CENTER		0	BALBOA HEIGHTS, C.Z.	0.000	0.000	0.000	0.061
NATICK LABORATORIES		11000	REDSTONE ARSENAL, AL.	1168.000	262.000	23.178	35.294
NIGHT VISION LABORATORY		1060	FT. BELVOIR, VA.	611.710	147.480	50.215	27.018
PICATINNY ARSENAL LABORATORIES		3087	NATICK, MASS.	525.000	65.900	40.152	12.406
RED TECHNICAL SUPPORT ACTIVITY		15	FT. BELVOIR, VA.	73.625	29.823	43.961	45.000
RESEARCH INSTITUTE OF ENVIRONMENTAL MEDICINE		6495	OVER, N.J.	594.642	666.245	72.600	45.000
RESEARCH INSTITUTE OF INFECTIOUS DISEASES		136	FT. MONMOUTH, N.J.	53.470	0.009	8.401	6.578
ROCK ISLAND ARSENAL LABORATORIES		6	NATICK, MASS.	60.421	18.583	6.902	2.444
RSCN INST FOR BEHAVIORAL AND SOCIAL SCIENCES		57	FT. DETRICK, MD.	93.217	13.819	17.818	3.100
TANK-AUTOMOTIVE COMMAND LABS		180	ROCK ISLAND, IL.	103.617	100.838	3.598	11.189
TROPIC TEST CENTER		0	WASHINGTON, D.C.	25.435	9.742	0.000	1.999
WALTER REED ARMY INSTITUTE OF RESEARCH		1125	WARREN, MI.	361.202	0.000	15.338	16.767
WHITE SAND MISSILE RANGE		18668	FT. CLAYTON, C.Z.	66.363	87.971	1.211	3.908
YUMA PROVING GROUND		1173	WASHINGTON, D.C.	389.300	58.600	0.000	12.517
		4458509	WHITE SANDS MR., N.M.	1407.139	444.518	169.507	155.310
		1086989	YUMA, ARIZONA	166.267	75.944	85.771	55.357
TOTALS		7279809		11727.181	4170.166	11798.504	837.289

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TABLE 3. NAVY ROTISE ACTIVITIES, PROGRAM AND PERSONNEL DATA, FY 1972

INSTALLATION	FUNDING DATA (MILLIONS \$)				PERSONNEL DATA									
	TOTAL		TOTAL INHOUSE		TOTAL	TOTAL		TOTAL		TOTAL		TOTAL		PROF
	INHOUSE	ROTISE	INHOUSE	ROTISE		INHOUSE	ROTISE	INHOUSE	ROTISE	INHOUSE	ROTISE	INHOUSE	ROTISE	
ENVIRONMENTAL PREDICTION RESEARCH FACILITY	1.158	0.885	1.079	0.806	16	27	1	1	1	1	1	1	1	CIV
NAVAL AEROSPACE MEDICAL RESEARCH LABORATORY	3.708	3.708	3.408	3.408	31	123	11	17	19	19	19	19	19	15
NAVAL AEROSPACE RECOVERY FACILITY	7.466	6.496	2.447	2.347	166	110	1	0	9	24	24	24	24	24
NAVAL AIR DEVELOPMENT CENTER	104.202	49.203	71.889	37.307	389	2335	11	27	107	1042	1042	1042	1042	1042
NAVAL AIR ENGINEERING CENTER	78.997	46.283	12.813	8.162	37	2198	0	4	15	406	406	406	406	406
NAVAL AIR PROPULSION TEST CENTER	16.450	11.052	11.233	7.425	10	690	0	0	9	158	158	158	158	158
NAVAL AIR TEST CENTER	89.774	74.328	34.713	31.014	911	2042	1	5	205	420	420	420	420	420
NAVAL AIR TEST FACILITY (SHIP INSTALLATIONS)	9.775	9.765	1.371	1.371	134	405	0	0	7	74	74	74	74	74
NAVAL BLOOD RESEARCH LABORATORY	0.469	0.469	0.332	0.332	10	13	4	0	6	0	0	6	0	0
NAVAL CIVIL ENGINEERING LABORATORY	11.787	8.434	9.700	6.833	21	361	1	39	9	196	196	196	196	196
NAVAL CLOTHING AND TEXTILE RESEARCH UNIT	1.205	1.205	0.558	0.558	1	60	0	0	1	23	23	23	23	23
NAVAL DENTAL RESEARCH INSTITUTE, NTC	0.760	0.742	0.489	0.489	20	12	1	2	8	8	8	8	8	8
NAVAL ELECTRONICS LABORATORY CENTER	59.325	54.714	29.981	24.472	94	1468	2	61	66	737	737	737	737	737
NAVAL EXPLOSIVE ORDNANCE DISPOSAL FACILITY	4.563	3.097	1.532	0.972	73	152	0	1	56	17	17	17	17	17
NAVAL MEDICAL FIELD RESEARCH LABORATORY	1.189	1.189	0.821	0.821	37	51	4	2	6	11	11	11	11	11
NAVAL MEDICAL RESEARCH INSTITUTE	6.543	6.543	4.323	4.323	204	207	48	25	106	73	73	73	73	73
NAVAL MEDICAL RESEARCH UNIT NO. 1	0.268	0.268	0.047	0.047	16	2	4	0	5	0	0	5	0	0
NAVAL MEDICAL RESEARCH UNIT NO. 2	2.035	2.035	1.489	1.489	35	9	13	2	30	5	5	30	5	5
NAVAL MEDICAL RESEARCH UNIT NO. 3	1.864	1.864	0.758	0.758	31	108	8	4	12	4	4	12	4	4
NAVAL MEDICAL RESEARCH UNIT NO. 4	1.140	1.140	0.760	0.760	38	41	5	2	14	17	17	14	17	17
NAVAL MISSILE CENTER	66.694	54.030	32.629	24.472	638	1691	0	7	134	521	521	134	521	521
NAVAL ORDNANCE MISSILE TEST FACILITY	101.190	62.010	78.696	43.332	53	2847	1	137	27	1144	1144	27	1144	1144
NAVAL PERSONNEL RESEARCH ACTIVITY	3.750	3.452	1.206	1.206	178	83	1	1	46	5	5	46	5	5
NAVAL RESEARCH LABORATORY	3.971	3.971	2.284	2.211	43	197	0	15	41	120	120	41	120	120
NAVAL SHIP R&D LABORATORY	145.678	140.048	120.057	114.427	114	3586	3	519	9	1476	1476	519	1476	1476
NAVAL SHIP R&D LABORATORY	14.570	13.342	7.380	6.301	138	587	2	17	15	240	240	17	240	240
NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER	103.696	39.204	78.889	28.455	50	3072	2	101	24	1232	1232	101	1232	1232
NAVAL SPACE SYSTEMS ACTIVITY	22.334	0.881	9.784	0.631	24	35	1	1	12	19	19	1	12	19
NAVAL SUBMARINE MEDICAL RESEARCH LABORATORY	1.950	1.950	1.446	1.446	42	67	7	14	16	37	37	14	16	37
NAVAL UNDERSEA R&D CENTER	78.596	46.724	48.893	31.374	284	1691	0	91	35	683	683	91	35	683
NAVAL UNDERWATER SYSTEMS CENTER	116.421	85.440	49.143	39.445	93	3140	0	73	23	1359	1359	73	23	1359
NAVAL UNIT, FORT DETRICK	0.117	0.117	0.025	0.025	16	1	2	0	6	0	0	2	0	6
NAVAL WEAPONS CENTER	172.091	108.975	105.453	68.527	716	4592	0	104	45	1453	1453	104	45	1453
NAVAL WEAPONS EVALUATION FACILITY	5.288	5.236	1.170	1.118	200	94	0	1	200	39	39	1	200	39
NAVAL WEAPONS LABORATORY	83.325	56.550	29.369	19.469	108	2703	0	67	27	1029	1029	67	27	1029
NAVY MEDICAL NEUROPSYCHIATRIC RESEARCH UNIT	1.492	1.492	0.975	0.975	19	58	11	9	14	26	26	9	14	26
NAVY TOXICOLOGY UNIT, NNMIC	0.385	0.380	0.234	0.229	17	7	3	0	8	2	2	3	0	8
PACIFIC MISSILE RANGE	90.112	58.156	65.355	44.150	727	2909	9	5	118	384	384	5	118	384
TOTALS	1417.971	968.977	828.864	570.336	5768	38339	157	1389	1531	13146	13146	157	1389	1531

TABLE 4. NAVY ROTEE FACILITIES DATA, FY 1972

INSTALLATION	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)				COST (MILLIONS \$)	
	ACRES	LABORATORY	ADMIN	OTHER	REAL PROPERTY	EQUIPMENT
ENVIRONMENTAL PREDICTION RESEARCH FACILITY					0.000	0.195
NAVAL AEROSPACE MEDICAL RESEARCH LABORATORY	0	0.806	0.843	6.351	0.000	0.195
NAVAL AEROSPACE MEDICAL RECOVERY FACILITY	0	131.787	19.604	11.693	2.807	2.073
NAVAL AIR DEVELOPMENT CENTER	101230	44.000	10.000	263.000	8.598	3.758
NAVAL AIR ENGINEERING CENTER	831	815.970	26.080	444.075	22.912	37.810
NAVAL AIR PROPULSION TEST CENTER	560	1373.426	177.625	723.209	32.293	17.039
NAVAL AIR TEST CENTER	66	410.937	51.800	136.000	45.076	13.600
NAVAL AIR TEST FACILITY (SHIP INSTALLATIONS)	6872	748.000	216.948	3101.833	111.589	40.050
NAVAL BLOOD RESEARCH LABORATORY	2500	59.204	29.598	91.906	34.172	7.431
NAVAL CIVIL ENGINEERING LABORATORY	0	6.000	0.160	1.000	0.000	0.473
NAVAL CLOTHING AND TEXTILE RESEARCH UNIT	22	120.352	21.977	31.548	5.733	5.679
NAVAL DENTAL RESEARCH INSTITUTE, NTC	2	10.000	7.000	3.000	0.275	0.600
NAVAL ELECTRONICS LABORATORY CENTER	1	8.900	5.100	6.000	0.000	0.359
NAVAL EXPLOSIVE ORDNANCE DISPOSAL FACILITY	1591	461.555	157.531	221.523	11.077	36.203
NAVAL MEDICAL FIELD RESEARCH LABORATORY	1084	50.771	19.797	43.335	2.851	2.437
NAVAL MEDICAL RESEARCH INSTITUTE	3	28.226	8.655	15.590	0.528	0.657
NAVAL MEDICAL RESEARCH UNIT NO. 1	4	151.730	21.561	26.590	4.016	0.623
NAVAL MEDICAL RESEARCH UNIT NO. 2	0	0.000	0.360	0.000	0.000	0.000
NAVAL MEDICAL RESEARCH UNIT NO. 3	2	32.780	38.674	17.826	0.101	0.890
NAVAL MEDICAL RESEARCH UNIT NO. 4	3	18.242	9.500	2.300	0.344	0.790
NAVAL MISSILE CENTER	1	22.053	16.716	18.975	0.387	0.440
NAVAL ORDNANCE LABORATORY	4	110.756	169.569	751.611	25.973	39.490
NAVAL ORDNANCE MISSILE TEST FACILITY	1059	388.021	178.085	636.274	46.618	34.165
NAVAL PERSONNEL R&D LABORATORY	112	84.310	30.540	238.950	6.670	3.487
NAVAL PERSONNEL RESEARCH ACTIVITY	0	22.156	2.703	1.420	0.652	0.450
NAVAL RESEARCH LABORATORY	1	47.300	4.900	0.000	0.210	0.289
NAVAL SHIP R&D LABORATORY	2161	2241.527	135.662	664.139	77.247	59.343
NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER	674	172.445	35.296	329.707	14.962	11.013
NAVAL SPACE SYSTEMS ACTIVITY	325	318.012	182.073	1957.680	64.767	43.015
NAVAL SUBMARINE MEDICAL RESEARCH LABORATORY	0	0.000	1.595	3.233	0.000	0.022
NAVAL UNDERSEA R&D CENTER	0	23.325	6.441	12.638	0.000	0.885
NAVAL UNDERWATER SYSTEMS CENTER	37575	336.900	33.457	671.100	38.846	44.345
NAVAL UNIT, FORT DETRICK	835	625.928	121.653	795.281	28.598	32.915
NAVAL WEAPONS CENTER	0	0.000	2.121	0.000	0.000	0.010
NAVAL WEAPONS EVALUATION FACILITY	1093019	722.689	163.857	5752.845	229.339	83.925
NAVAL WEAPONS LABORATORY	5	19.590	21.522	101.958	8.500	0.450
NAVY MEDICAL NEUROPSYCHIATRIC RESEARCH UNIT	4490	484.567	73.655	808.830	63.573	31.101
NAVY TOXICOLOGY UNIT, NNMIC	0	13.977	4.500	0.000	0.000	0.317
PACIFIC MISSILE RANGE	0	2.260	0.140	1.416	0.187	0.508
	29600	93.463	271.263	1395.996	142.600	170.000
TOTALS	1284692	10201.965	2278.563	19291.832	1031.501	726.839

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TABLE 5. AIR FORCE ROT&E ACTIVITIES, PROGRAM AND PERSONNEL DATA, FY 1972

INSTALLATION	FUNDING DATA (MILLIONS \$)				PERSONNEL DATA						
	TOTAL		TOTAL		TOTAL	TOTAL			PHD	PROF	PROF
	INHOUSE	ROT&E	INHOUSE	ROT&E		MIL	CIV	MIL			
AEROPROPULSION LABORATORY	60.830	5.387	60.830	5.387	51	341	4	10	47	182	182
AEROSPACE RESEARCH LABORATORIES	13.814	9.155	12.754	8.095	72	173	22	43	56	84	84
ARMAMENT DEVELOPMENT AND TEST CENTER	384.255	100.205	129.713	57.006	4531	3707	114	35	1269	678	678
ARNOLD ENGINEERING DEVELOPMENT CENTER	64.416	10.286	55.053	8.873	80	146	4	3	62	53	53
AVIONICS LABORATORY	108.277	8.682	100.858	7.124	161	584	17	20	103	354	354
CAMBRIDGE RESEARCH LABS	60.959	34.050	56.240	32.030	182	977	14	159	70	599	599
EASTERN TEST RANGE	338.951	115.506	153.255	39.495	1507	1875	34	1	103	112	112
FLIGHT DYNAMICS LABORATORY	70.877	25.587	68.472	23.822	198	941	4	34	97	511	511
FLIGHT TEST CENTER	80.290	64.978	49.619	35.641	3101	1775	20	0	271	174	174
FRANK J. SEILER RESEARCH LABORATORY	1.540	1.540	0.570	0.570	22	9	11	1	22	2	2
HUMAN RESOURCES LABORATORY	11.348	4.472	10.090	3.214	134	231	7	38	91	116	116
MATERIALS LAB	56.043	10.676	44.909	9.703	60	337	20	46	60	245	245
ROCKET PROPULSION LABORATORY	29.750	13.123	25.851	10.624	188	298	17	6	91	104	104
ROME AIR DEVELOPMENT CENTER	169.205	37.179	92.745	31.927	325	1130	6	15	119	525	525
SPACE AND MISSILE TEST CENTER	84.860	26.595	77.617	19.452	452	395	5	1	253	155	155
USAF SCHOOL OF AEROSPACE MEDICINE	17.398	15.196	10.886	9.013	603	357	92	40	224	127	127
WEAPONS LABORATORY	85.704	40.866	75.218	30.577	796	397	96	20	572	188	188
6570 AEROSPACE MEDICAL RESEARCH LABORATORY	14.318	9.613	12.798	8.093	127	168	29	26	77	96	96
TOTALS	1652.835	533.096	1037.488	340.646	12590	13841	516	498	3587	4305	4305

TABLE 6. AIR FORCE ROTCE FACILITIES DATA, FY 1972

INSTALLATION	ACRES	LABORATORY	ADMIN	OTHER	SPACE (THOUSANDS OF SQUARE FEET)		COST (MILLIONS \$)
AEROPROPULSION LABORATORY	40	309,500	66,500	274,775	REAL	EQUIPMENT	
AEROSPACE RESEARCH LABORATORIES					PROPERTY		12,894 16,713
ARMAMENT DEVELOPMENT AND TEST CENTER	34	134,953	49,837	34,719			12,625 12,603
ARNOLD ENGINEERING DEVELOPMENT CENTER	464,795	676,611	944,744	6656,315			210,851 223,159
AVIONICS LABORATORY	40,118	1149,163	201,411	532,348			361,532 59,005
CAMBRIDGE RESEARCH LABS	264	218,583	5,304	264,277			21,008 35,638
EASTERN TEST RANGE	859	614,773	19,708	125,916			20,554 64,228
FLIGHT DYNAMICS LABORATORY	18203	130,543	739,482	7044,196			370,670 519,800
FLIGHT TEST CENTER	90	541,130	60,600	26,000			22,735 54,000
FRANK J. SEILER RESEARCH LABORATORY	246323	541,686	323,084	6405,099			178,895 423,455
HUMAN RESOURCES LABORATORY	0	9,394	2,860	0,240			1,287 1,483
MATERIALS LAB	13	62,679	29,544	31,539			1,925 4,102
ROCKET PROPULSION LABORATORY	9	0,117	0,061	0,038			6,750 10,396
ROME AIR DEVELOPMENT CENTER	54400	419,046	99,248	4,780			29,869 24,003
SPACE AND MISSILE TEST CENTER	2817	719,708	92,402	238,531			29,351 72,699
USAF SCHOOL OF AEROSPACE MEDICINE	45546	91,407	354,384	431,954			96,600 495,861
WEAPONS LABORATORY	53	452,105	95,530	59,114			15,377 21,932
6570 AEROSPACE MEDICAL RESEARCH LABORATORY	934	428,659	14,620	22,187			10,791 33,887
	30	211,900	10,000	15,200			11,570 15,938
TOTALS	874568	6711,957	3109,619	22167,228			1413,268 2088,902

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TABLE 7. DEPARTMENT OF DEFENSE RDCE ACTIVITIES, PROGRAM AND PERSONNEL DATA, FY 1972

INSTALLATION	FUNDING DATA (MILLIONS \$)				PERSONNEL DATA					
	TOTAL	TOTAL INHOUSE	RDCE	RCTSE	TOTAL	TOTAL	PHD	PHD	PROF	PROF
ARMED FORCES RADIOBIOLOGY RES. INSTITUTE	3.983	3.950	3.127	3.094	83	138	20	14	47	39
BETHESDA, MARYLAND										
TOTALS	3.983	3.950	3.127	3.094	83	138	20	14	47	39

# SUMMARY

## DEPARTMENT OF DEFENSE IN-HOUSE R&D LABORATORIES

### PROGRAM DATA FOR FY 1972

	(MILLIONS)
TOTAL ANNUAL LABORATORY PROGRAM	2840.100
TOTAL INHOUSE PROGRAM	1536.053
TOTAL RDT&E PROGRAM	2034.385
TOTAL INHOUSE RDT&E	1082.604
TOTAL ANNUAL OPERATING COST	378.238

### PERSONNEL DATA (END OF FY 1972)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD	TOTAL PROFESSIONALS
MILITARY	8208	871	3740
CIVILIAN	57249	2939	24799
TOTAL	65457	3810	28539

### PHYSICAL FACILITIES (END OF FY 1972)

ACRES	1240472
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#### SPACE (THOUSANDS OF SQ FT)

LABORATORY	20900.897
ADMINISTRATIVE	4399.507
OTHER	19505.494
TOTAL	44805.898

#### COST (MILLIONS)

REAL PROPERTY	1268.906
EQUIPMENT	1237.314
TOTAL	2506.220

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TABLE 1A. ARMY R&D LABORATORIES, PROGRAM AND PERSONNEL DATA, FY 1972

INSTALLATION	FUNDING DATA (MILLIONS \$)				PERSONNEL DATA									
	TOTAL	INHOUSE	TOTAL	RDTEE	INHOUSE	TOTAL	CIV	MIL	PHD	PHD	PROF	PROF		
FT. RUCKER, AL.	1.868	1.868	1.285	1.285	48	25	17	2	35	4				
MOUNTAIN VIEW, CAL.	43.641	13.458	43.021	12.838	34	575	1	26	34	236				
WHITE SANDS MR., N.M.	12.219	11.034	9.220	8.035	483	258	1	11	40	115				
EATONTOWN, N.J.	20.956	18.146	12.699	11.294	25	251	1	5	14	160				
BALLISTICS RESEARCH LABORATORIES	30.868	20.928	30.609	20.808	75	879	9	85	62	410				
BENET WEAPONS LABORATORY	15.334	13.665	9.891	8.332	3	410	0	43	2	175				
COATING AND CHEMICAL LABORATORY	3.546	1.738	2.899	1.471	5	43	1	2	6	28				
COLD REGIONS R&E LABORATORIES	7.435	6.198	5.197	4.322	41	248	2	22	36	84				
COMBAT SURVEILLANCE & TGT ACQUISITION LABS	33.000	13.500	33.000	13.500	38	312	1	6	23	172				
COMMUNICATIONS ADP LABORATORY	31.700	14.100	31.400	13.800	23	420	0	9	12	255				
CONSTRUCTION ENGINEERING RESEARCH LABORATORY	6.404	5.069	5.873	4.701	3	168	0	33	4	94				
EDGEWOOD ARSENAL LABS	39.080	36.760	33.205	30.885	196	1123	61	65	146	557				
ELECTRONIC WARFARE LABORATORY	32.560	15.312	32.228	14.980	63	384	0	4	40	191				
ELECTRONICS TECHNOLOGY AND DEVICES LAB	22.092	12.393	21.953	12.254	13	475	1	55	5	302				
ENGINEER TOPOGRAPHIC LABORATORIES	13.411	5.800	13.256	5.645	25	265	1	21	12	169				
ENGINEER WATERWAYS EXPERIMENT STATION	24.534	22.073	14.451	12.469	58	1197	3	36	42	355				
FRANKFORD ARSENAL LABS	35.355	26.244	32.246	23.135	31	1609	2	33	22	724				
HARRY DIAMOND LABORATORY	77.783	40.845	45.986	33.530	9	1505	1	61	6	533				
HUMAN ENGINEERING LABORATORY	3.629	3.253	3.208	2.832	30	100	1	10	19	53				
INSTITUTE OF DENTAL RESEARCH	1.384	1.384	0.715	0.715	56	25	10	1	30	9				
INSTITUTE OF SURGICAL RESEARCH	2.799	2.799	1.435	1.435	127	79	20	3	42	20				
LAND WARFARE LABORATORY	8.853	5.262	8.551	4.996	16	111	0	3	14	55				
LETTERMAN ARMY INSTITUTE OF RESEARCH	11.960	1.462	0.704	0.704	90	20	19	2	50	10				
MATERIALS AND MECHANICS RESEARCH CENTER	33.682	15.257	27.293	13.173	10	607	5	65	10	219				
MATERIAL SYSTEMS ANALYSIS AGENCY	15.569	8.455	14.044	7.512	13	314	0	7	13	238				
MEDICAL BIOMECHANICAL RESEARCH LABORATORY	1.025	1.025	0.865	0.865	18	30	2	4	12	15				
MEDICAL EQUIPMENT R&D LAB	0.949	0.949	0.775	0.775	15	34	0	0	1	3				
MEDICAL RESEARCH AND NUTRITION LAB, FGH	3.532	3.532	2.426	2.426	119	99	30	12	69	45				
MEDICAL RESEARCH LABORATORY	3.255	3.255	1.754	1.754	119	132	17	14	98	36				
MEDICAL RESEARCH UNIT	0.301	0.301	0.224	0.224	6	0	5	0	7	0				
MEDICAL RESEARCH UNIT	0.317	0.317	0.191	0.191	9	8	2	0	5	0				
MISSILE RES., DEV. AND ENGINEERING LAB	82.091	37.154	73.792	29.964	31	1196	3	59	34	680				
MOBILITY EQUIPMENT R&D CENTER	91.970	27.406	44.745	16.855	54	1370	4	23	34	596				
NATICK LABORATORIES	40.231	25.684	22.207	14.968	132	1236	11	90	62	479				
NIGHT VISION LABORATORY	32.654	15.727	32.654	15.727	51	409	0	34	35	219				
PICATINNY ARSENAL LABORATORIES	129.900	86.000	99.200	55.300	68	2676	1	62	51	1889				
RESEARCH INSTITUTE OF ENVIRONMENTAL MEDICINE	3.351	3.351	2.600	2.600	71	102	18	20	55	49				
RESEARCH INSTITUTE OF INFECTIOUS DISEASES	5.111	5.111	3.040	3.040	365	248	46	19	49	38				
ROCK ISLAND ARSENAL LABORATORIES	21.360	13.666	14.717	9.227	9	749	1	19	11	304				
RSC INST FOR BEHAVIORAL AND SOCIAL SCIENCES	8.706	2.540	8.706	2.540	11	130	1	44	9	93				
TANK-AUTOMOTIVE COMMAND LABS	78.128	27.551	46.291	16.659	16	989	0	6	19	412				
WALTER REED ARMY INSTITUTE OF RESEARCH	19.956	19.956	13.691	13.691	546	606	168	120	305	253				
TOTALS	1052.949	590.528	803.247	453.457	3155	21417	466	1141	1575	10279				



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TABLE 2A. ARMY R&D FACILITIES DATA, FY 1972

INSTALLATION	ACRES	SPACE (THOUSANDS OF SQUARE FEET)		REAL PROPERTY EQUIPMENT	COST (MILLIONS \$)
		LABORATORY	ADMIN		
AEROMEDICAL RESEARCH LABORATORY	8	26.933	5.940	7.470	0.379
AIR MOBILITY R&D LABORATORY	108	85.014	43.308	15.584	1.474
ATMOSPHERIC SCIENCES LABORATORY	45	0.056	0.025	0.033	48.000
AVIONICS LABORATORY	9	43.500	7.500	1.706	2.605
BALLISTICS RESEARCH LABORATORIES	3380	277.823	113.784	0.000	15.633
BENET WEAPONS LABORATORY	4	176.776	24.600	0.000	2.266
COATING AND CHEMICAL LABORATORIES	0	0.017	0.002	0.000	0.060
COLD REGIONS R&E LABORATORIES	631	19.013	9.848	10.000	0.410
COMBAT SURVEILLANCE & TGT ACQUISITION LABS	71	103.535	7.281	2.000	3.906
COMMUNICATIONS ADP LABORATORY	12	75.305	7.389	1.000	2.418
CONSTRUCTION ENGINEERING RESEARCH LABORATORY	15	68.375	32.075	0.000	0.000
EDGEWOOD ARSENAL LABS	4055	490.713	97.329	148.154	3.481
ELECTRONIC WARFARE LABORATORY	0	61.311	40.868	10.850	16.899
ELECTRONICS TECHNOLOGY AND DEVICES LAB	279	142.900	8.100	0.000	2.525
ENGINEER TOPOGRAPHIC LABORATORIES	0	55.899	10.828	3.700	5.832
ENGINEER WATERWAYS EXPERIMENT STATION	2009	1391.000	338.596	192.133	12.482
FRANKFORD ARSENAL LABS	43	558.000	134.000	557.000	0.000
HARRY DIAMOND LABORATORY	2770	281.602	46.119	56.154	15.080
HUMAN ENGINEERING LABORATORY	10	26.500	17.605	28.953	24.852
INSTITUTE OF DENTAL RESEARCH	0	7.711	4.722	1.425	0.970
INSTITUTE OF SURGICAL RESEARCH	1	25.424	0.800	19.000	11.874
LAND WARFARE LABORATORY	80	38.691	2.655	12.628	0.709
LETTERMAN ARMY INSTITUTE OF RESEARCH	3	60.102	8.900	0.000	0.000
MATERIALS AND MECHANICS RESEARCH CENTER	48	381.778	89.394	203.880	1.958
MATERIEL SYSTEMS ANALYSIS AGENCY	4	8.700	36.500	3.000	0.686
MEDICAL BIOMECHANICAL RESEARCH LABORATORY	0	11.463	1.022	0.000	0.467
MEDICAL EQUIPMENT R&D LAB	0	21.523	9.081	6.469	14.247
MEDICAL RESEARCH AND NUTRITION LAB, FGH	2	83.663	5.138	19.087	1.773
MEDICAL RESEARCH LABORATORY	20	88.025	5.368	34.734	0.976
MEDICAL RESEARCH UNIT	15	7.000	0.900	0.000	0.444
MISSILE RES. DEV. AND ENGINEERING LAB	0	5.000	0.600	0.000	5.079
MOBILITY EQUIPMENT R&D CENTER	11000	1168.000	262.000	408.000	0.280
NATICK LABORATORIES	1060	611.710	147.480	158.648	0.100
NIGHT VISION LABORATORY	3087	525.000	65.900	274.600	0.061
PICATINNY ARSENAL LABORATORIES	15	73.625	29.883	67.131	23.178
RESEARCH INSTITUTE OF ENVIRONMENTAL MEDICINE	6495	594.642	68.245	2580.998	35.294
RESEARCH INSTITUTE OF INFECTIOUS DISEASES	0	60.421	18.563	28.647	50.215
ROCK ISLAND ARSENAL LABORATORIES	57	93.217	13.819	198.731	40.152
RSCH INST FOR BEHAVIORAL AND SOCIAL SCIENCES	180	103.617	100.838	106.679	43.961
TANK-AUTOMOTIVE COMMAND LABS	0	25.435	9.742	1.823	45.000
WALTER REED ARMY INSTITUTE OF RESEARCH	1125	361.202	0.000	0.000	72.600
	1173	389.300	58.600	0.000	6.902
TOTALS	37814	8636.021	2485.347	5280.785	17.818
					3.598
					11.189
					0.000
					1.999
					15.838
					16.767
					12.917
					434.393
					443.540

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TABLE 3A. NAVY R&D LABORATORIES, PROGRAM AND PERSONNEL DATA, FY 1972

INSTALLATION	FUNDING DATA (MILLIONS \$)			PERSONNEL DATA									
	TOTAL	TOTAL INHOUSE	TOTAL ROTEE	TOTAL CIV	TOTAL PHD	TOTAL PHD	TOTAL PHD	TOTAL PHD	TOTAL PHD	TOTAL PHD	TOTAL PHD	TOTAL PHD	TOTAL PHD
ENVIRONMENTAL PREDICTION RESEARCH FACILITY	1.158	0.885	1.079	0.896	16	27	1	1	1	1	1	1	1
NAVAL AEROSPACE MEDICAL RESEARCH LABORATORY	3.708	3.708	3.408	3.408	31	123	11	17	19	19	19	19	19
NAVAL AIR DEVELOPMENT CENTER	104.202	49.203	71.889	37.507	389	2335	11	27	107	1042	1042	1042	1042
NAVAL AIR ENGINEERING CENTER	78.997	46.283	12.813	8.162	37	2198	0	4	15	406	406	406	406
NAVAL BLOOD RESEARCH LABORATORY	0.469	0.469	0.332	0.332	10	13	4	0	0	6	6	6	6
NAVAL CIVIL ENGINEERING LABORATORY	11.787	8.434	9.700	6.833	21	361	1	39	9	196	196	196	196
NAVAL CLOTHING AND TEXTILE RESEARCH UNIT	1.205	1.205	0.558	0.558	1	60	0	0	1	23	23	23	23
NAVAL ELECTRONICS LABORATORY CENTER	59.325	54.713	32.774	29.981	94	1468	2	61	66	737	737	737	737
NAVAL MEDICAL FIELD RESEARCH LABORATORY	1.189	1.189	0.821	0.821	37	51	4	2	6	11	11	11	11
NAVAL MEDICAL RESEARCH INSTITUTE	6.543	6.543	4.323	4.323	204	207	48	25	106	73	73	73	73
NAVAL MEDICAL RESEARCH UNIT NO. 1	0.268	0.268	0.047	0.047	16	2	4	0	5	0	0	0	0
NAVAL MEDICAL RESEARCH UNIT NO. 2	2.035	2.035	1.489	1.489	35	9	13	2	30	5	5	5	5
NAVAL MEDICAL RESEARCH UNIT NO. 3	1.864	1.864	0.758	0.758	31	108	0	4	12	4	4	4	4
NAVAL MEDICAL RESEARCH UNIT NO. 4	1.140	1.140	0.760	0.760	38	41	5	2	14	17	17	17	17
NAVAL ORDNANCE LABORATORY	101.150	62.010	78.696	43.332	53	2847	1	137	27	1144	1144	1144	1144
NAVAL PERSONNEL R&D LABORATORY	3.673	3.600	2.284	2.211	43	197	0	15	41	120	120	120	120
NAVAL PERSONNEL RESEARCH ACTIVITY	3.971	3.971	3.340	3.340	34	165	0	35	34	90	90	90	90
NAVAL RESEARCH LABORATORY	145.678	140.048	120.057	114.427	114	3986	3	519	9	1476	1476	1476	1476
NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER	14.570	13.342	7.380	6.301	136	587	2	17	15	240	240	240	240
NAVAL SUBMARINE MEDICAL RESEARCH LABORATORY	103.696	39.204	78.689	28.455	50	3072	2	101	24	1232	1232	1232	1232
NAVAL UNDERSEA R&D CENTER	1.950	1.950	1.446	1.446	42	67	7	14	16	37	37	37	37
NAVAL UNDERWATER SYSTEMS CENTER	78.596	46.724	43.893	31.374	284	1691	0	91	35	683	683	683	683
NAVAL WEAPONS CENTER	116.421	85.440	49.143	39.445	93	3140	0	73	23	1359	1359	1359	1359
NAVAL WEAPONS LABORATORY	172.091	108.975	105.453	68.527	716	4592	0	104	45	1453	1453	1453	1453
NAVY MEDICAL NEUROPSYCHIATRIC RESEARCH UNIT	83.325	56.550	29.369	19.469	108	2703	0	67	27	1029	1029	1029	1029
	1.492	1.492	0.975	0.975	19	58	11	9	14	26	26	26	26
TOTALS	1100.503	741.245	666.676	454.887	2654	30108	138	1366	713	11475	11475	11475	11475

TABLE 4A. NAVY R&amp;D FACILITIES DATA, FY 1972

INSTALLATION	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)				COST (MILLIONS \$)	
	ACRES	LABORATORY	ADMIN	OTHER	REAL PROPERTY	EQUIPMENT
ENVIRONMENTAL PREDICTION RESEARCH FACILITY						
NAVAL AEROSPACE MEDICAL RESEARCH LABORATORY	0	0.806	0.863	6.351	0.000	0.195
NAVAL AIR DEVELOPMENT CENTER	0	131.787	19.604	11.693	2.807	2.073
NAVAL AIR ENGINEERING CENTER	831	815.970	26.080	444.075	22.912	37.810
NAVAL BLOOD RESEARCH LABORATORY	560	1373.426	177.625	723.209	32.293	17.039
NAVAL CIVIL ENGINEERING LABORATORY	0	6.000	0.160	1.000	0.000	0.473
NAVAL CLOTHING AND TEXTILE RESEARCH UNIT	22	120.352	21.977	31.548	5.723	5.679
NAVAL ELECTRONICS LABORATORY CENTER	1591	461.555	157.531	3.000	0.275	0.600
NAVAL MEDICAL FIELD RESEARCH LABORATORY	3	26.226	8.655	15.590	11.077	36.203
NAVAL MEDICAL RESEARCH INSTITUTE	4	151.730	21.561	26.590	0.528	0.657
NAVAL MEDICAL RESEARCH UNIT NO. 1	0	0.000	0.360	0.000	4.016	0.623
NAVAL MEDICAL RESEARCH UNIT NO. 2	2	32.780	38.674	0.000	0.000	0.000
NAVAL MEDICAL RESEARCH UNIT NO. 3	3	18.242	9.500	17.826	0.101	0.890
NAVAL MEDICAL RESEARCH UNIT NO. 4	1	22.053	16.716	18.975	0.387	0.440
NAVAL ORDNANCE LABORATORY	1059	388.021	178.085	636.274	46.618	34.165
NAVAL PERSONNEL PGD LABORATORY	0	22.156	2.703	1.420	0.652	0.450
NAVAL PERSONNEL RESEARCH ACTIVITY	1	47.300	4.800	0.000	3.210	0.289
NAVAL RESEARCH LABORATORY	2161	2241.527	135.662	664.139	77.247	59.343
NAVAL SHIP R&D LABORATORY	674	172.445	35.296	329.707	14.962	11.013
NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER	325	318.012	182.073	1957.680	64.767	43.015
NAVAL SUBMARINE MEDICAL RESEARCH LABORATORY	0	23.325	6.441	12.636	0.000	0.885
NAVAL UNDERSEA R&D CENTER	37575	336.900	33.457	671.100	38.846	44.345
NAVAL UNDERWATER SYSTEMS CENTER	835	625.928	121.655	795.281	28.598	32.915
NAVAL WEAPONS CENTER	1093019	722.689	163.957	5752.845	229.339	83.925
NAVAL WEAPONS LABORATORY	4490	484.567	73.655	808.830	63.573	31.101
NAVY MEDICAL NEUROPSYCHIATRIC RESEARCH UNIT	0	13.977	4.500	0.000	0.000	0.317
TOTALS	1143158	8569.774	1448.570	13153.594	645.285	445.235

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TABLE 5A. AIR FORCE R&D LABORATORIES, PROGRAM AND PERSONNEL DATA, FY 1972

INSTALLATION		FUNDING DATA (MILLIONS \$)			PERSONNEL DATA									
					TOTAL		INHOUSE		TOTAL		PHD		PHD	
		TOTAL	INHOUSE	RDTEE	TOTAL	RDTEE	TOTAL	RDTEE	MIL	CIV	MIL	CIV	MIL	CIV
AEROPROPULSION LABORATORY	WPAFB, OH.	60.830	5.387	60.830	5.387	5.387	51	541	4	10	47	162	PROF	CIV
AEROSPACE RESEARCH LABORATORIES	WPAFB, OH.	13.614	9.155	12.754	8.095	8.095	72	173	22	43	56	84	PROF	CIV
AVIONICS LABORATORY	WPAFB, OH.	108.277	8.682	100.858	7.124	7.124	161	584	17	20	103	354	PROF	CIV
CAMBRIDGE RESEARCH LABS	L.G. HANSCOM FLD, MS.	60.959	34.050	56.240	32.030	32.030	182	977	14	159	70	599	PROF	CIV
FLIGHT DYNAMICS LABORATORY	WPAFB, OH.	70.877	25.587	68.472	23.822	23.822	198	941	4	34	97	511	PROF	CIV
FRANK J. CEILER RESEARCH LABORATORY	USAF ACADEMY, CO.	1.540	1.540	0.570	0.570	0.570	22	9	11	1	22	2	PROF	CIV
HUMAN RESOURCES LABORATORY	BROOKS AFB, TX.	11.348	4.472	10.090	3.214	3.214	134	231	7	38	91	116	PROF	CIV
MATERIALS LAB	WPAFB, OH.	56.043	10.676	44.909	9.703	9.703	60	337	20	46	60	245	PROF	CIV
ROCKET PROPULSION LABORATORY	EDWARDS AFB, CA.	29.750	13.123	25.851	10.624	10.624	188	298	17	6	91	104	PROF	CIV
ROME AIR DEVELOPMENT CENTER	GRIFFISS AFB, N.Y.	169.205	37.179	92.745	31.927	31.927	325	1130	6	15	119	525	PROF	CIV
WEAPONS LABORATORY	XIRTLAND AFB, N.M.	85.704	40.866	75.218	30.577	30.577	796	397	96	20	572	188	PROF	CIV
6570 AEROSPACE MEDICAL RESEARCH LABORATORY	WPAFB, OH.	14.318	9.613	12.798	8.093	8.093	127	168	29	26	77	96	PROF	CIV
TOTALS		682.665	200.330	561.335	171.166	171.166	2316	5586	247	418	1405	3006	PROF	CIV

TABLE 6A. AIR FORCE R&amp;D FACILITIES DATA, FY 1972

INSTALLATION	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)				COST (MILLIONS \$)	
	ACRES	LABORATORY	ADMIN	OTHER	REAL PROPERTY	EQUIPMENT
AEROPROPULSION LABORATORY	40	309.500	66.500	274.775	12.894	16.713
AEROSPACE RESEARCH LABORATORIES	24	134.953	49.837	34.719	12.625	12.603
AVIONICS LABORATORY	264	218.583	5.304	264.277	21.008	35.638
CAMBRIDGE RESEARCH LABS	859	614.773	19.708	125.916	20.554	64.228
FLIGHT DYNAMICS LABORATORY	90	541.130	60.600	26.000	22.705	54.000
FRANK J. SEILER RESEARCH LABORATORY	0	9.394	2.860	0.240	1.287	1.483
HUMAN RESOURCES LABORATORY	13	62.679	29.544	31.539	1.925	4.102
MATERIALS LAB	9	0.117	0.061	0.038	6.750	10.396
ROCKET PROPULSION LABORATORY	54400	419.046	99.248	4.780	29.869	24.003
ROME AIR DEVELOPMENT CENTER	2817	719.708	92.402	238.531	29.351	72.699
WEAPONS LABORATORY	934	428.659	14.620	22.187	10.791	33.887
6570 AEROSPACE MEDICAL RESEARCH LABORATORY	30	211.900	10.000	15.200	11.570	15.938
TOTALS	59490	3670.442	450.684	1038.202	181.329	345.690

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TABLE 74. DEPARTMENT OF DEFENSE ROT&E FACILITIES DATA, FY 1972

INSTALLATION	SPACE AND PROPERTY			COST (MILLIONS \$)
	ACRES	LABORATORY	ADMIN	
ARMED FORCES RADIOBIOLOGY RES. INSTITUTE	10	24.660	14.906	7.899
TOTALS	10	24.660	14.906	7.899
			OTHER	2.849
			32.913	2.849

INSTALLATION AEROMEDICAL RESEARCH LABORATORY

FT. RUCKER, AL.

C.O. COL ROBERT W. BAILEY TECH. DIR. DR. E.J. BALDES

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	1.285	1.375
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.583	0.531
TOTAL ANNUAL LAB	1.868	1.906
TOTAL INHOUSE	1.868	1.906
TOTAL INHOUSE RDT&E	1.285	1.375
ANNUAL OPERATING COST	0.773	0.878

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	48	17	35	13
CIVILIAN	25	2	4	21
TOTAL	73	19	39	34

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN		OTHER	REAL PROP
8	26.933	5.940	7.470	40.343	0.379	2.186

...MISSION

TO CONDUCT TIMELY STUDIES ON CURRENT AND ANTICIPATED RESEARCH PROBLEMS OF A FUNDAMENTAL OR IMMEDIATE NATURE RELEVANT TO ARMY AVIATION AND AIRBORNE OPERATIONS AND PHYSICAL PERFORMANCE STANDARDS AND THE MEDICAL ASPECTS OF RETENTION AND SELECTION OF AVIATORS AND PARACHUTISTS.

...CURRENT IMPORTANT PROGRAMS

RESEARCH PSYCHOLOGY APPLIED TO MEDICALLY SIGNIFICANT ARMY AVN PROBLEMS.  
 MEDICAL RESEARCH APPLIED TO THE PROBLEMS IN ARMY AVN.  
 RESEARCH OF VISUAL PROBLEMS MEDICALLY SIGNIFICANT TO ARMY AVN.  
 RESEARCH OF PSYCHOACOUSTICAL PROBLEMS MEDICALLY SIGNIFICANT TO ARMY AVN.  
 RESEARCH OF BIOENGINEERING PROBLEMS MEDICALLY SIGNIFICANT TO ARMY AVN.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

EQUIPMENT INCLUDES A SOUNDPROOF HEARING ROOM, ANECHOIC CHAMBER, COLORIMETER, ECG AND EEG MACHINES, A BIOCHEMISTRY LAB, AN ELECTRONICS AND ENGINEERING FABRICATION SHOP, PHOTOGRAPHY LAB AND AIRBORNE MONITORING EQUIPMENT. EQUIPMENT IS USED TO STUDY THE PHYSIOLOGY AND PSYCHOLOGICAL ASPECTS OF AVIATION AND AIRBORNE PERSONNEL IN THE TRAINING AND OPERATIONAL ENVIRONMENT.

INSTALLATION AIR DEFENSE BOARD

EL PASO, TEXAS

PRES. COL WILLIAM H. HOLCOMBE

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	5.057	2.964
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	2.942	3.580
TOTAL ANNUAL LAB	7.999	6.544
TOTAL INHOUSE	7.979	6.370
TOTAL INHOUSE RDT&E	5.037	2.790
ANNUAL OPERATING COST	0.576	0.625

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PRCF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	342	1	42	300
CIVILIAN	117	0	11	106
TOTAL	459	1	53	406

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	LAB	ADMIN	OTHER		REAL PROP	EQUIP
26	36.550	38.646	52.724	127.920	1.895	11.024

...MISSION  
 PLAN CONDUCT REPORT ON ST & CHECKTEST OF AIR DEF EQUIP & SYS.  
 PARTICIPATE IN ENG TEST INIT PROD TEST PRE-PROD TEST & OTHER TESTS.  
 PROVIDE ADVICE TO PROPONENT AGENCIES DURING DEVELOPMENT OF EQUIPMENT.

...CURRENT IMPORTANT PROGRAMS  
 VULCAN GUNNER TRACKING EVALUATOR  
 CHECKTEST AN/MWM-3 FOR VULCAN  
 ENGINEERING/SERVICE TEST AN/TSQ-73  
 SERVICE TEST AN/TPX-46 INTERROGATOR  
 SUPPORT ROLAND II MISSILE WEAPON SYSTEM

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
 ASSURE MAX UTILIZATION OF RESOURCES IN ACCOMPLISHMENT OF MSN. PLAN, CON-  
 DUCT, RECORD & REPORT RESULTS OF TEST & EVAL OF WPN SYS & FIRE DIST SYS.  
 EVAL ITEMS FOR SAFETY, SUIT FOR ARMY USE &/OR SUIT FOR ISSUANCE TO FLD.  
 COMMENT ON QMOO/QMR/SDR & MNT PKG. ASSIST IN REVISION OF MIL SPECS. PRO-  
 VIDE TEST REQUIREMENTS FOR TEST PLAN. CONDUCT PROGRAM IN TEST  
 METHODOLOGY TO ASSURE PROPER TEST REPORTS. SUPPORTS FLD RSCH STUDIES,  
 TESTS & OPNS. PROVIDE REPRESENTATION FOR ARMY BOARDS, COMMITTEES & SYM-  
 POSIA. ASSIST IN PREP OF TNG LITERATURE AND SELECTION OF TNG AIDS.  
 EQUIPMENT COMPUTER TAC & INSTRUMENTATION RADAR, AUTOMATED DATA  
 ACQUISITION SYSTEMS CINETHEDDOLITES PHOTO LAB & FILM READING EQUIP.  
 SITE MONITOR FOR ELECTRONIC TEST OF EQUIP AND DCNA ANA RANGE FOR FIRING  
 FORWARD AREA WEAPONS TARGET DEVICES AND TARGET DRONES.



# INSTALLATION AIR MOBILITY R&D LABORATORY

MOUNTAIN VIEW, CAL.

DIR. PAUL F. YAGGY DEPUTY DIR. NORMAN L. ROBINSON

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972	1973
	(ACTUAL)	(ACT + EST)
TOTAL RDT&E	43.021	33.675
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.001	0.001
TOTAL OTHER	0.619	0.538
TOTAL ANNUAL LAB	43.641	34.214
TOTAL INHOUSE	13.458	12.553
TOTAL INHOUSE RDT&E	12.838	12.014
ANNUAL OPERATING COST	1.952	2.101

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	34	1	34	0
CIVILIAN	575	26	236	339
TOTAL	609	27	270	339

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
108	85.014	43.308	15.584	143.906	1.474	5.446

## ...MISSION

MANAGES AND EXECUTES R&D OF ARMY AIRMOBILE SYSTEMS, THROUGH DEMONSTRATION OF TECHNOLOGY. PROVIDES TECHNICAL SUPPORT TO PROJECT/PRODUCT MANAGERS & SYSTEM DEVELOPERS AS REQUIRED. PROVIDES INDEPENDENT TECHNICAL RISK ASSESSMENT TO CG USAAVSCOM AND HIGHER AUTHORITY.

## ...CURRENT IMPORTANT PROGRAMS

RESEARCH IN FUNDAMENTAL ROTOR AERODYNAMICS, DYNAMICS & NOISE.

RESEARCH & DEVELOPMENT OF SMALL GAS TURBINES.

TO IMPROVE RELIABILITY & MAINTAINABILITY OF AIRMOBILE SYSTEMS.

COMPOSITES & MEASURE OPNL. FLT. LOADS TO IMPROVE STRUCTURES FOR A/C. EVOLVE TECHNOLOGY & CRITERIA TO IMPROVE FLIGHT SAFETY & SURVIVABILITY.

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

THREE DIRECTORATES AT MOFFETT FIELD CAL, CLEVELAND OHIO, HAMPTON VA & COLOCATED WITH NASA, PARTICIPATING IN RESEARCH OF AIRMOBILE SYSTEMS & DISCIPLINES, JOINTLY USING WIND TUNNELS, SIMULATORS & LABORATORY TEST FACILITIES, INCLUDING SHOPS, FLIGHT LINE & HANGAR, STRUCTURE LAB, ENGINE TEST FACILITIES & COMPUTATIONAL EQUIPMENT. FOURTH DIRECTORATE AT FORT EUSTIS VA., PERFORMING ADVANCED APPLICATIONS WORK. MAJOR EQUIPMENT & FACILITIES: FILAMENT WINDING MACHINES, TENSILE TESTERS, VIBRATION TESTER, SMALL BALLISTIC RANGE, CALIBRATION LAB, ENVIRONMENT CHAMBER, ATOMIC ABSORPTION SPECTR, TELEMETER GROUND STATION, NON-DESTRUCT TESTING FACILITY, FLIGHT SAFETY LAB.

# INSTALLATION AIRBORNE COMMUNICATIONS & ELECTRONICS BOARD FT. BRAGG, N.C.

PRES. COL PETER E. KELLEY ENGIN. ADV. EDWIN S. SPAINHOUR

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972	1973
	(ACTUAL)	(ACT + EST)
TOTAL RDT&E	1.488	1.645
TOTAL PROCUREMENT	0.000	0.000
TOTAL G&M	0.000	0.000
TOTAL OTHER	1.907	2.000
TOTAL ANNUAL LAB	3.395	3.645
TOTAL INHOUSE	3.395	3.645
TOTAL INHOUSE RDT&E	1.488	1.645
ANNUAL OPERATING COST	0.737	0.792

PERSONNEL	PERSONNEL DATA (END OF FY 1972)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	207	0	41		166
CIVILIAN	61	0	8		53
TOTAL	268	0	49		219

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
27	0.000	50.879	114.000	164.879	4.190	3.090

## ...MISSION

PLAN, CONDUCT, AND REPORT ON EXPANDED SERVICE TESTS AND CHECK TESTS OF AIRBORNE, COMMUNICATIONS, AND ELECTRONICS EQUIPMENT AND SYSTEMS. THE COMMUNICATIONS AND ELECTRONICS-TYPE TESTS ARE USED AT DIV LEVEL OR BELOW. THE AIRBORNE TESTS PERTAIN TO EQUIP AND SYS WHICH SUPP AIRDROP & TRANSPORT.

## ...CURRENT IMPORTANT PROGRAMS

TEST OF THE AERIAL RECOVERY KIT  
 TEST OF JOINT SERVICE INTERIOR INTRUSION DEVICE  
 TEST OF PARKHILL (COMMUNICATIONS SECURITY)  
 TEST OF AN-USD-501 AIRBORNE SURVEILLANCE DRONE SYSTEM  
 TEST OF FORWARD AREA TELETYPEWRITER SET

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

FACILITIES INCLUDE: HANGAR BLD, COMMUNICATIONS-ELECTRONICS FACILITY, CRYTOGRAPHIC TEST FACILITY, AND WOODWORK SHOP. MAJOR EQUIPMENT INCLUDES: 2 T-28B AIRCRAFT, 40000-POUND LOADER, 5-TON WRECKER, 20-TON MOBILE CRANE, 3 SEMITRAILERS, SEVERAL STANDARD VEHICLES, 1 U-6 AIRCRAFT, 1 UH-1 AIRCRAFT, VARIOUS TYPES OF STANDARD PARACHUTES, STANDARD PLATFORMS, NINE GASOLINE DRIVEN GENERATORS, BALLASTABLE AIRDROP VEHICLES WITH REMOVABLE WEIGHT INCREMENTS, THREE ANEMOMETERS, VARIOUS THERMOMETERS, STOPWATCHES, ELEVEN TACTICAL RADIO SETS, TWO RADIO RECEIVERS, SIX TELETYPEWRITER SETS, TWENTY TWO SIGNAL GENERATORS, TWO LEVEL METERS, 1 SOUND AND VIBRATION ANALYZER, 1 PHOTO ANALYZER, 5 OSCILLOGRAPHS, CLOSED CIRCUIT VIDEO EQUIPMENT, STRAIN GAUGES, ACCELEROMETERS, AND GALVINOMETERS.

# INSTALLATION ARCTIC TEST CENTER

FT. GREELY, AK.

C.O. COL DAVID J. SCHUMACHER TECH. DIR. JERRELL L. SANDERS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	2.627	2.472
TOTAL PROCUREMENT	0.027	0.000
TOTAL OCM	0.003	0.038
TOTAL OTHER	2.232	2.300
TOTAL ANNUAL LAB	4.889	4.810
TOTAL INHOUSE	4.859	4.772
TOTAL INHOUSE RDT&E	2.606	2.434
ANNUAL OPERATING COST	2.212	2.500

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	321	1	26	295
CIVILIAN	29	0	6	23
TOTAL	350	1	32	318

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)			TOTAL	COST (MILLION \$)	
	LAB	ADMIN	OTHER		REAL PROP	EQUIP
726014	20.550	30.600	229.847	280.997	13.158	4.063

## ...MISSION

PLAN COND & RPT ON ENVIRON PHASES OF ENG TESTS, EXP SVC TESTS, CK TESTS, INITIAL PROD TEST, MIL POY TEST & APPROP PRE-PROD TEST. TO PROVIDE ADV TO PROP AGENCIES AND MAT DEV, COND OTHER TEST & EVAL AS DIR BY CG, TECOM. PROV SUPP TO DOD, AND OTHER GA SUB-EL, AS DIR, FOR SVCS NOT SHOWN.

## ...CURRENT IMPORTANT PROGRAMS

MISSILE GUIDED, DRAGON  
HELICOPTER CH-47C  
PORTABLE MULTI-SHOT FLAME WEAPON  
AERIAL MINE DISPERSING SYSTEM  
HOOD EXTREME COLD WEATHER ARTIFICIAL RUFF

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

THE ATC FAC WITH FEW EXCEP CAN BE USED FOR MULT APPL'S IN ACCOMP TESTS ALLOWING THE CEN TO ACC A NO OR VAR OF TEST ITEMS AT ANY ONE TIME. ALL FIRING RGS ARE ORIENTED TO FT GREELY 500,000 ACRE IMPACT AREA WEST OF DELTA R. THIS AREA PROVIDES A MAX UNOBS RG OF 50,000 METERS. A MAJORITY OF THIS AREA IS WITHIN RESTR AIRSPACE ALLOWING UNRESTR FIRING TO A MAX ORD OF 5,000 FT. COORD WITH LOCAL FAA FLT SVC CAN EFFECT UNLIMITED ORDINATE CAP OVER ALL FIRING RGS. 1ST, 2D OR 3RD ORDER SURVEY MONUMENTS EXIST NEAR ALL THE CEN FIRING RGS & TEST SITES. A GOOD SECONDARY RD SYS CONNECTS ALL RGS TO THE ALASKA & RICHARDSON HYWS. CLASS A TEL CAP EXISTS WITH PRIN RGS & A NON-TACTICAL RADIO NET PROV ALT COMMO WITH ALL PARTS OF THE RES. ADEQUATE MAINT FAC FOR DS&GS SUPP OF MOST ITEMS, TO INCL ACFT, ARE ORG TO THE CEN. THE CEN HAS CMPTR FAC ADEQUATE FOR ANY RQMT. NET FAC ARE AVAIL.

# INSTALLATION ARMOR AND ENGINEER BOARD

FT. KNOX, KENTUCKY

PRES. COL JOHN P. BERRIS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	2.186	2.178
TOTAL PROCUREMENT	0.261	0.290
TOTAL O&M	0.000	0.000
TOTAL OTHER	3.200	3.440
TOTAL ANNUAL LAB	5.647	5.868
TOTAL INHOUSE	5.647	5.868
TOTAL INHOUSE RDT&E	2.186	2.178
ANNUAL OPERATING COST	0.390	0.441

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL FHDS	TOTAL PROF	NON- PROF
MILITARY	450	0	97	353
CIVILIAN	101	0	1	100
TOTAL	551	0	98	453

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
6900	6.200	68.068	166.374	240.642	1.419	2.355

## ...MISSION

PLAN, CONDUCT, AND REPORT ON EST, MPT, AND CHECK TEST OF ARMOR AND ENG ENGINEER EQUIPMENT, AUTO SYS AND MATERIAL, AND ATOMIC DEMO MUNITIONS. PARTICIPATE IN ET, IPT, AND P AS DIRECTED. PROVIDE ADVICE TO AGENCIES AND DEVELOPERS IN DEVELOPMENT OF ARMOR AND ENGINEER EQUIPMENT.

## ...CURRENT IMPORTANT PROGRAMS

METHODOLOGY INVESTIGATION ON AUTOMATED ANTI-ARMOR TEST CAPABILITY  
IMPROVE ALL ASPECTS OF MILITARY SERVICE UNDER THE MODERN VOLUNTEER ARMY  
MILITARY POTENTIAL TEST OF 5 AND 10 KW GENERATORS  
INITIAL PRODUCTION TESTS ON M60A2 TANK, COMBAT FULL TRACKED, 152MM GUN  
MILITARY POTENTIAL TEST OF SIMFIRE HIT-KILL INDICATOR

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

USAARENBD MAJOR EQUIP: ADEQUATE STILL AND MOTION PICTURE PHOTO EQUIP:  
VIDEO TAPE RECORDER& STATIONARY ELEVATED CAMERA PLATFORM FOR HEIGHTS UP  
TO 40 FT ABOVE ADJACENT GRADE& GENERATOR LOAD BANK& MOBILE DYNAMOMETER,  
WHICH MEASURES DRAW BAR PULL FROM 0 TO 100 TONS& OVERHEAD CRANE, 40 TON&  
TACTICAL WHLD VEH& COMBAT VEH& ENGR CONSTR EQUIP& MACHINE SHOP EQUIP/  
SHOP MAINTENANCE SETS. THE BOARD FACILITIES CONSIST OF 6400 ACRES FOR  
TESTING& MCFARLAND-OLIVER (160 ACRES) WITH A FIRING CAPABILITY OF UP TO  
2000 METERS& ADDITIONAL RANGE WITH FIRING UP TO 10,000 METERS ON A SPACE  
AVAILABLE BASIS& STILL WATER TEST AREA& BARRACKS SPACE 72,988 SQ FT&  
OFFICE SPACE 71,788 SQ FT& SHOP AREA 69,888 SQ FT& STORAGE 48,106 SQ FT&  
AND MOTOR PARK 85,750 SQ FT.

# INSTALLATION ATMOSPHERIC SCIENCES LABORATORY

WHITE SANDS MR, N.M.

C.O. AND DIR. RICHARD C. CHABOT DEPUTY DIR. DR. MARVIN DIAMOND

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	9.220	9.646
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.031	0.031
TOTAL OTHER	2.968	3.031
TOTAL ANNUAL LAB	12.219	12.708
TOTAL INHOUSE	11.034	10.720
TOTAL INHOUSE RDT&E	8.035	7.658
ANNUAL OPERATING COST	0.000	0.000

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	483	1	40	443	
CIVILIAN	258	11	115	143	
TOTAL	741	12	155	586	

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	COST (MILLION \$)	
	LAB	ADMIN	OTHER		REAL PROP	EQUIP
45	0.056	0.025	0.033	0.114	48.000	2.500

## ...MISSION

RESEARCH IN ATMOSPHERIC SCIENCES, DEVELOPMENT OF METEOROLOGICAL TECHNIQUES AND EQUIPMENT FOR FIELD ARMY. FURNISH METEOROLOGICAL SERVICES TO ARMY RDTE ACTIVITIES. PROVIDE ADMIN AND LOGISTICAL SUPPORT TO LOWER NUPPER ATMOSPHERE RESEARCH AND SOUNDING ROCKET FACILITY AND CAPABILITY

## ...CURRENT IMPORTANT PROGRAMS

DETERMINATION OF ATMOSPHERIC EFFECTS ON ARMY SYSTEMS  
DEVELOP ARMY ATMOSPHERIC SENSING SYSTEMS, TECHNIQUES, APPLICATIONS  
RESEARCH OF MICROSCALE, MESOSCALE, AND UPPER ATMOSPHERIC PHENOMENA  
FOG DISSIPATION  
METEOROLOGICAL SUPPORT TO RDTE ACTIVITIES

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

METEOROLOGICAL RESEARCH FACILITY AND CAPABILITY  
WIND TUNNEL FACILITY, LOW SPEED  
ATMOSPHERIC PHYSICS RESEARCH FACILITY AND CAPABILITY  
UPPER ATMOSPHERE RESEARCH AND SOUNDING ROCKET FACILITY AND CAPABILITY  
ION MASS SPECTROMETER SYSTEM  
METEOROLOGICAL SOUNDING ROCKET FACILITIES-N.M., UTAH, ALASKA, CANAL ZONE  
REMOTE ATMOSPHERIC SENSING FIELD RESEARCH FACILITY  
ATMOSPHERIC SPECTROSCOPY-LASER PROPAGATION FACILITY  
METEOROLOGICAL RDTE SUPPORT FACILITIES - ALASKA TO PANAMA CANAL ZONE  
METEOROLOGICAL INSTRUMENTATION TEST, MAINTENANCE, CALIBRATION FACILITY  
FACILITY FOR SONIC OBSERVATION OF TRAJECTORY AND IMPACT OF MISSILES  
COLOR DENSITOMETER FOR ANALYSIS OF METEOROLOGICAL SATELLITE DATA

# INSTALLATION AVIATION SYSTEMS TEST ACTIVITY

EDWARDS AFB, CAL.

C.O. COL DEAN E. WRIGHT TECH. DIR. JAMES S. HAYDEN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	3.689	4.395
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.789	0.840
TOTAL ANNUAL LAB	4.478	5.235
TOTAL INHOUSE	4.478	5.235
TOTAL INHOUSE RDT&E	3.689	4.395
ANNUAL OPERATING COST	1.112	1.040

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	62	0	23	39
CIVILIAN	116	1	26	90
TOTAL	178	1	49	129

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
19	0.004	0.033	0.098	0.135	1.140	4.165

## ...MISSION

CONDUCT AIRWORTHINESS QUALIF TESTS ON ALL ARMY ACFT & COMPONENTS ENTER-  
 GING INVENTORY OR CONSIDERED FOR SPECIFIC APPLICATION. MONITOR CONTRACTOR  
 FLT TESTING & PARTICIPATE IN ENG FLT TESTS CONDUCTED BY USAF, USN OR  
 FAA. PUBLISH TEST RESULTS.

## ...CURRENT IMPORTANT PROGRAMS

CH-47 IMPROVEMENT TESTS  
 CH-54 AIRWORTHINESS FLIGHT QUALIFICATION  
 INSTRUMENTATION VIBRATION SURVEYS  
 LOH-, OH-6, OH-58 IMPROVEMENT TESTS

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

IC-47 1U-8G 10V-1C 1T28-B 2F-51D U1H-1H AND 9 TEST AIRCRAFT  
 1EMR COMPUTER WITH TELEMETRY  
 3 IARBORNE DATA ACQUISITION SYSTEMS  
 2 REMOTE GROUND STATIONS WITH COMPUTER AND TELEMETRY CAPABILITY  
 4 MAGNETIC TAPE SELECTRIC TYPEWRITERS FOR TEST REPORT PREPARATION  
 LIMITED INSTRUMENT CALIBRATION CAPABILITY

# INSTALLATION AVIATION TEST BOARD

FT. RUCKER, AL.

PRES. COL DANIEL G. GUST

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	6.426	6.610
TOTAL PROCUREMENT	0.626	0.321
TOTAL O&M	0.196	0.330
TOTAL OTHER	2.292	2.400
TOTAL ANNUAL LAB	9.540	9.661
TOTAL INHOUSE	6.935	7.092
TOTAL INHOUSE RDT&E	3.821	4.041
ANNUAL OPERATING COST	3.247	3.445

PERSONNEL	PERSONNEL DATA (END OF FY 1972)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	221	0	44		177
CIVILIAN	139	0	4		135
TOTAL	360	0	48		312

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	COST (MILLION \$)	
	LAB	ADMIN	OTHER		REAL PROP	EQUIP
1234	2.440	49.334	180.754	232.528	2.650	13.185

...MISSION  
PLAN, CONDUCT & REPORT ON SERVICE & CHECK TESTS OF AIRCRAFT, A/C SUB-SYSTEMS & ANCILLARY EQUIP. PARTICIPATE IN ENGINEERING, PREPRODUCTION & INITIAL PRODUCTION TESTS AS DIRECTED. ADVISE PROPONENT AGENCIES DURING THE DEVELOPMENT OF A/C SYSTEMS.

...CURRENT IMPORTANT PROGRAMS  
INFRA-RED PROJECTS  
CH-47C ARCTIC TEST  
OH-58 PROJECTS  
XM56 MINE DISPENSER  
NEW DS MAINTENANCE SHOPS CONCEPT

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
HAVE REQUIRED FACILITIES & CAPABILITIES TO PERFORM STATED MISSION, TO REVIEW & COMMENT ON QMDOS, MATL NEEDS, MAINT PACKAGES & TO ASSIST IN REVIEWING MIL SPECS. ABILITY TO EVALUATE & RECOMMEND ON SAFETY & SUITABILITY OF MATLS FOR ARMY USE, TO SUPPORT FIELD RESEARCH, STUDIES, TESTS & OPERATIONS OF OTHER AMC SUBORDINATE ELEMENTS, DA OR DOD AGENCIES. CAN PLAN DIRECT & CONTROL PROGRAMS IN METHODOLOGY TO AS SURE PROPER TESTING & REPORTING IN CURRENT & FUTURE YRS. ABLE TO ASSIST IN PREPARING TRAINING LITERATURE & SELECTION OF TRAINING AIDS, TO RECOMMEND TO CG TECOM THROUGH ESTABLISHED PROCEDURES, R&D PROJECTS DESIGNED TO IMPROVE TECOM TEST & EVALUATION.

# INSTALLATION AVIONICS LABORATORY

EATONTOWN, N.J.

C.O. LTC EVERETT RICHARDS TECH. DIR. THEODORE SUETA

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	12.699	11.752
TOTAL PROCUREMENT	8.257	9.151
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	20.956	20.903
TOTAL INHOUSE	18.146	17.845
TOTAL INHOUSE RDT&E	11.294	10.223
ANNUAL OPERATING COST	5.014	5.658

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	25	1	14	11	
CIVILIAN	251	5	160	91	
TOTAL	276	6	174	102	

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	LAB	ADMIN	OTHER		REAL PROP	EQUIP
9	43.500	7.500	1.706	52.706	2.605	14.900

## ...MISSION

APPLIED RES DEVEL AND ENGRG IN ARMY AVIATION ELECTRONICS INCLUDING  
NAVIGATION LANDING COMMUNICATIONS ENVIRONMENT SENSING CONTROL THEORY  
AIRCRAFT ANTENNAS INSTRUMENTATION GROUND AND AIRBORNE SYSTEMS  
INSTALLATION AND TEST SYSTEMS ENGRG

## ...CURRENT IMPORTANT PROGRAMS

LOW LEVEL NIGHT OPERATIONS FOR ARMY AIRCRAFT  
LORAN CD NAVIGATION SYSTEM  
ATTENDED AREA TACTICAL LANDING SYSTEM  
NATIONAL LANDING SYSTEM  
AIRCRAFT SYSTEMS ENGINEERING

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

TACTICAL AVIONICS SYSTEMS SIMULATOR  
AIRCRAFT ANTENNA TEST FACILITY  
FIXED BASE COCKPIT SIMULATOR UH-1  
INSTRUMENTED C-47 AIRCRAFT FOR TESTING NAVIGATION SYSTEMS  
GYRO TEST FACILITY  
MOVING EARTH SIMULATOR FOR DOPPLER NAVIGATOR TESTING  
ELECTROMAGNETIC RADIATION TEST FACILITY



# INSTALLATION BALLISTICS RESEARCH LABORATORIES

ABERDEEN PROV GR,

C.O. COL RUDOLPH A. AXELSON DIR. ROBERT J. EICHELBERGER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972	1973
	(ACTUAL)	(ACT + EST)
TOTAL RDT&E	30.609	29.005
TOTAL PROCUREMENT	0.139	0.200
TOTAL O&M	0.120	0.120
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	30.868	29.325
TOTAL INHOUSE	20.928	20.120
TOTAL INHOUSE RDT&E	20.808	20.000
ANNUAL OPERATING COST	5.593	7.837

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	75	9	62	13
CIVILIAN	879	85	410	469
TOTAL	954	94	472	482

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
3380	277.823	113.784	0.000	391.607	15.633	34.429

## ...MISSION

CONDUCT RES AND EXPL DEVL IN SCIENCES/TECHNOLOGIES NECESSARY FOR  
CONCEIVING DESIGNING DEVELOPING AND EVALUATING WEAPONS SYSTEMS  
PURSUE ORIENTED FUND RESEARCH IN PHYSICS CHEM MATH ENGR AND BIOPHYSICS  
INVESTIGATE PERTINENT BRANCHES OF MILITARY SCIENCE AND TECHNOLOGIES

## ...CURRENT IMPORTANT PROGRAMS

MATHEMATICAL MODELS OF GUN PROPELLANT SYSTEMS  
CONVENTIONAL WARHEAD EFFECTS  
WARHEAD DYNAMICS FRAGMENTATION-EXPLOSIVE METAL INTERACTION  
REFINED FLIGHT DYNAMICS OF PROJECTILES AND MISSILES  
VULNERABILITY GROUND AND AIRBORNE TARGETS-OFFENSIVE/DEFENSIVE MEASURES

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

SUPERSONIC AND HYPERSONIC WIND TUNNELS/TRANSONIC RANGE  
EXPLOSIVE BLAST CHAMBERS AND HIGH ALTITUDE BLAST SPHERE  
SHOCK TUBES-SIMULATION OF NUCLEAR BL ST/CHEMICAL REACTION RATE  
PULSE RADIATION FACILITY-TANDEM VAN LE GRAFF ACCELERATOR  
EXPLOSIVE FIELD TEST FACILITIES  
HIGH SPEED MOTION PHOTOGRAPHY SCHLIEREN INTERFEROMETRY  
ELECTRON MICROSCOPE-ELECTRON SPIN RESONANCE-NUCLEAR MAGNETIC RESEARCH  
ELECTROMAGNETIC RADIATION RANGES  
ANALOG COMPUTER FOR SIMULATION OF DYNAMICS OF GUN AND RIFLE  
PROPULSION AND COMBUSTION CHAMBERS  
LASERS FOR PLASMA PROPAGATION AND SIGNATURES  
AFTER GLOW REACTION CHAMBER-UPPER ATMOSPHERE CHEM REACTION RATE

# INSTALLATION BENET WEAPONS LABORATORY

WATERVLIET, N.Y.

C.O. COL CHRISTOPHER MAGGIO TECH. DIR. ROBERT E. WEIGLE

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	9.891	10.254
TOTAL PROCUREMENT	3.583	3.414
TOTAL O&M	1.732	1.050
TOTAL OTHER	0.128	0.058
TOTAL ANNUAL LAB	15.334	14.776
TOTAL INHOUSE	13.665	13.084
TOTAL INHOUSE RDT&E	8.332	8.562
ANNUAL OPERATING COST	3.455	3.675

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	3	0	2	1
CIVILIAN	410	43	175	235
TOTAL	413	43	177	236

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL REAL PROP	EQUIP
4	176.776	24.600	0.000	201.376	2.266	3.842

...MISSION  
 DESIGN DEV ARTILLERY, TANK, AIR DEFENSE SECONDARY CANNON ABOVE 20MM.  
 SPARE PARTS SUCH AS BREECH MECHS, MUZZLE DEVICES, BORE EVACUATORS  
 SCAVENGERS AUTO LOADERS, SYS MGT, DESIGN DEV OF MORTAR REC. RIFLES  
 CONDUCT BASIC APPL RESEARCH MFG TECH TO SPT THE DEVELOPMENT MISSION

...CURRENT IMPORTANT PROGRAMS  
 DEV OF 105MM XM205 HOW FOR 105MM TOWED S.R. HOW XM204  
 DEV SYS MGT OF LIGHT WEIGHT COMPANY MORTAR SYSTEM  
 APPL OF FRACTURE MECHS TO FATIGUE LIFE PREDICTIONS FOR CANNON TUBES  
 DEV OF CANNON, 155MM HOW XM199 FOR 155MM HOW XM198. DEV OF COMPOSITE  
 SYSTEMS WITH METAL MATRICES INORGANIC FIBERS FOR HI-TEMP APPLICATIONS

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
 UNIQUE FACILITIES CAPABILITIES INCLUDE HIGH PRESSURE METALLURGY WITH  
 20-30 K-BAR FLUID EXTRUSION PRESS, WHISKER GROWTH TEST, NEUTRON ANALYSIS  
 150TOPE COUNTING, DYNAMIC TEST OF BREECH COMPONENTS TUBE SECTIONS--FULL  
 SIZE--BY PRESSURE/PULSE SIMULATING FIRING LOADS, EXP STRESS ANALYSIS THRU  
 2 3 DIMENSIONAL PHOTOELASTICITY, COMP. MTRLS ELECTRODEPOSITION--VACUUM  
 COATER ELECTRON-BEAM VAPOR-DEPOSITION--ENCLOSED PROOF RANGE--20MM MAX--  
 ELECTRON MICROSCOPY--2.3 ANGST. RESOLUTION 250000X MAG--CRYOGENICS  
 (HELIUM DEWAR APP) TO TEMPS OF 4 KELVIN HI-PERFORMANCE SHOCK TEST (1200  
 1500 G FOR GUN COMPONENTS, HI-TEMP VACUUM FURNACE--3000 C MAX--CRYOGENIC  
 TIME OF FLIGHT MASS SPECTROMETER, 20000 GAUSS MAGNET FOR TEST OF HIGH  
 TEMP SPECIMENS, ELECTROPLATING, ANODIZING TITANEUM HARD COAT PROCESSES,  
 ELECTRON MICROPROBE ANALYZER--B-UR IN PPM--IBM 360-44 COMPUTER

# INSTALLATION COATING AND CHEMICAL LABORATORY

ABERDEEN PROV GR, MD.

C.O. COL RUDOLPH A. AXELSON DIR. HARRY L. AMMLUNG

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	2.899	2.006
TOTAL PROCUREMENT	0.186	0.194
TOTAL O&M	0.458	0.155
TOTAL OTHER	0.003	0.008
TOTAL ANNUAL LAB	3.546	2.363
TOTAL INHOUSE	1.738	1.035
TOTAL INHOUSE RDT&E	1.471	0.743
ANNUAL OPERATING COST	0.138	0.179

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	5	1	6	1
CIVILIAN	43	2	28	15
TOTAL	48	3	34	16

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	COST (MILLION \$)	
	LAB	ADMIN	OTHER		REAL PROP	EQUIP
0	0.017	0.002	0.005	0.024	0.060	0.410

## ...MISSION

MANAGE & DIRECT THE ASSIGNED PORTION OF AMC MAT & FUELS & LUBES PROGRAM  
INCLUDES BASIC & APPLIED RESEARCH IN AUTO CHEMICALS ORGANIC & SEMI OR-  
GANIC COATINGS PAINT CLEANING FUELS & LUBES COORDINATE THE RESEARCH  
PROGRAM OF AMC IN THE FIELD OF FUELS & LUBES & RELATED MATERIALS

## ...CURRENT IMPORTANT PROGRAMS

DEVELOPE FULLY COORDINATED FED SPEC FOR UNLEADED AUTOMOTIVE GASOLINES  
DEFINING PERFORMANCE CHARACTERISTICS OF MULTI VISCOSITY ENGINE LUBS  
COATINGS TO IMPROVE PROTECTION AND OPERATIONAL RELIABILITY OF MATERIEL  
FUNCTIONAL CLEANING COMPOUNDS AND PAINT REMOVERS  
INCREASE THE STABILITY OF ANTIFREEZE CORROSION INHIBITOR

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

SPECTROPHOTOMETERS  
ACCELERATED WEATHERING MACHINE  
CORROSION TEST CABINETS  
GAS CHROMATOGRAPHS  
PROGRAMED HUMIDITY CHAMBERS  
FUEL COKER  
SUB ZERO TEST CABINET  
STROKING UNIT (BRAKE FLUID)  
TEMPERATURE FLOW CORROSION UNIT  
SPRAY BOOTH  
AUTOMATIC V/L RATIO ANALYZER  
TWO GENERAL PURPOSE LABORATORY BUILDING AND EXPOSURE FARM

# INSTALLATION COLD REGIONS R&E LABORATORIES

HANOVER, N.H.

C.O. AND DIR. COL J.F. CASTRO TECH. DIR. DR. D.F. FREITAG

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	5.197	4.897
TOTAL PROCUREMENT	0.005	0.000
TOTAL O&M	0.170	0.200
TOTAL OTHER	2.063	2.700
TOTAL ANNUAL LAB	7.435	7.797
TOTAL INHOUSE	6.198	6.440
TOTAL INHOUSE RDT&E	4.322	3.720
ANNUAL OPERATING COST	1.450	1.600

PERSONNEL	PERSONNEL DATA (END OF FY 1972)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	41	2	36		5
CIVILIAN	248	22	84		164
TOTAL	289	24	120		169

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL REAL PROP	EQUIP	
	LAB	ADMIN	OTHER			
631	19.013	9.848	108.415	137.276	3.906	4.383

## ...MISSION

AS THE ARMY LABORATORY FOR SCIENCE AND TECHNOLOGY IN COLD REGIONS, USACRREL CONDUCTS AND COORDINATES RESEARCH AND SURVEILLANCE OF TECHNOLOGY APPLICABLE TO THE ARMY'S NEEDS IN THOSE GEOGRAPHIC AREAS OF THE WORLD WHERE COLD PRESENTS A SEVERE PROBLEM AT LEAST ONE YEAR IN TEN.

## ...CURRENT IMPORTANT PROGRAMS

ENGINEERING IN COLD ENVIRONMENTS  
 ENVIRONMENTAL QUALITY FOR COLD REGIONS - MILITARY CONSTRUCTION  
 RESEARCH IN MILITARY ENGINEERING AND CONSTRUCTION  
 COLD REGIONS RESEARCH  
 MOBILITY AND ENVIRONMENTAL RESEARCH

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

THE MAIN LABORATORY AT USACRREL CONTAINS 24 COLD LABS & WHICH CAN BE OPERATED TO -580°K, SPECIAL TESTING APPARATUS FOR FROZEN MATERIALS, A CHEMICAL LAB, AN ELECTRON MICROSCOPE LAB, A ROCK MECHANICS LAB, A SOILS PROCESSING LAB, AND A SPRAY IRRIGATION TEST FACILITY. FIELD WORK SUPPORT IN ALASKA IS PROVIDED BY A FIELD STATION AT FAIRBANKS. REPRESENTATIVE AREAS OF COMPETENCE AMONG USACRREL'S SCIENTISTS AND ENGINEERS INCLUDE BIOLOGY, BIOCHEMISTRY, METEOROLOGY, CHEMICAL ENGINEERING, CIVIL ENGINEERING, MARINE ENGINEERING, MECHANICAL ENGINEERING, GEOLOGY, SANITARY ENGINEERING, ELECTRONICS, ELECTRICAL ENGINEERING, PHYSICS, CHEMISTRY, HYDROLOGY, AND GEOPHYSICS.

# INSTALLATION COMBAT SURVEILLANCE & TGT ACQUISITION LABS FT. MONMOUTH, N.J.

DEPUTY DIR. HERBERT GOLDWAG

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	33.000	32.100
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	33.000	32.100
 TOTAL INHOUSE	 13.500	 13.200
TOTAL INHOUSE RDT&E	13.500	13.200
ANNUAL OPERATING COST	1.300	1.400

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHOS		
MILITARY	38	1	23	15
CIVILIAN	312	6	172	140
TOTAL	350	7	195	155

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN		OTHER	REAL PROP
71	103.535	7.281	26.133	136.949	2.418	23.000

## ...MISSION

DO R&D OF EQUIPMENTS FOR COMBAT SURVEILLANCE, TARGET ACQUISITION, IDENTIFICATION-FRIEND-OR-FOE, RADIOLOGICAL SURVEY. APPLY FOLLOWING TECHNOLOGIES RADAR, I-R, LIGHT, SOUND, SEISMICS, NUCLEONICS, ELECTRO-OPTICS, PHOTOGRAPHY, GEOPHYSICS, IMAGE INTERPRETATION, DATA TRANSFER AND DRONES

## ...CURRENT IMPORTANT PROGRAMS

ADV DEV AND SUPPORTING TECHNOLOGY FOR ARTILLERY LOCATING RADAR AN/MPQ-1  
ENGR DEV OF MOBILE, HELI-LIFTED, MORTAR-LOCATING RADAR AN/TPQ-36  
ENGR DEV OF MOVING-TARGET LOCATING RADAR SET AN/TPS-58  
ENGR DEV OF LASER DESIGNATOR TRACKER SYSTEM (LDTS)  
REMOTELY MONITORED BATTLEFIELD SENSOR SYSTEM (REMBASS)

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

PHOTO PROCESSING, OPTICAL TEST, LENS RESOLUTION TEST PATTERN FACILITIES (FAC)& INCL DARK ROOMS, CHEM LABS. RADAR TECHNIQUES DEV FAC& INCL MICROWAVE DARK ROOM, ANTENNA PATTERN & TEST RANGE, 65FT HIGH RADAR TEST PLATFORM& FIVE OUTDOOR & ONE INDOOR RANGES INSTRUMENTED FROM 30 MC TO 70 GS PER SEC. MOBILE SPECTRAL AND TIME-DISTRIBUTION MEASUREMENT FAC GOOD FROM 2900 A TO INTERMEDIATE IR. OPTICS FACILITY FOR MEASURING DETECTIVITY OF ELEMENTS, OUTPUT OF SOURCES, TRANSMISSION CHARACTERISTICS. LASER TEST & MEASUREMENT FAC FOR LASER SYSTEM COMPONENTS. RADAR INSTRUMENTATION FAC CAPABLE OF TRACKING X-BAND RADAR AND COLLECTING AND RECORDING POSITION, VELUCITY, AND SIGNAL STRENGTH& HAS S-BAND SHORT-RANGE SEARCH CAPABILITY

# INSTALLATION COMMUNICATIONS ADP LABORATORY

FT. MONMOUTH, N.J.

C.O. AND DIR. COL J. MITCHELL

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	31.400	21.600
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.300	0.330
TOTAL ANNUAL LAB	31.700	21.930
TOTAL INHOUSE	14.100	11.230
TOTAL INHOUSE RDT&E	13.800	10.900
ANNUAL OPERATING COST	0.000	0.000

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	23	0	12	11
CIVILIAN	420	9	255	165
TOTAL	443	9	267	176

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	COST (MILLION \$)	
	LAB	ADMIN	OTHER		REAL PROP	EQUIP
12	75.305	7.389	1.015	83.709	0.000	6.987

## ...MISSION

TO PERFORM R&D ACTIVITIES RELATED COMMUNICATIONS & ADP EQUIPMENT AND SYSTEMS WHICH INCLUDE THE FIELDS OF RADIO TELEPHONIC TELEGRAPHIC AND FACSIMILE COMMUNICATIONS ADP TECHNIQUES & DATA STORAGE COMMUNICATION SECURITY ELECTROMAGNETIC COMPATIBILITY & COMMUNICATING PROCESSES

## ...CURRENT IMPORTANT PROGRAMS

TACTICAL RADIO COMMUNICATIONS SYSTEM

RADIO SET AN ARC 70

AACOMS TSQ 85 TTC38 ANUGC72 73 74 75 76 TD10651G TD1069

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

LAB SPACES TEST INSTRUMENTS & SPECIALIZED ELECTRONIC MECHANICAL AND OPTICAL EQUIPMENT TO PERFORM DESIGN FABRICATION & TESTING OF ELECTRONIC CIRCUITS COMPONENTS EQUIPMENTS IN DISPLAY PRINTING SPEECH NARROW AND WIDE BAND RADIOS FROM LOW TO LIGHT FREQUENCY RANGE CONVENTIONAL AND ADVANCED MULTIPLEXING SWITCHING ERROR DETECTION & CODING ANTENNA AND PROPAGATION TECHNOLOGIES SMALL SCALE COMPUTERS TO TEST & EVALUATE ADVANCED COMPUTER CONCEPTS & SUBSYSTEM SOFTWARE & HARDWARE FIXED & MOBILE TACTICAL RADIO MODEM MULTIPLEXING SWITCHING EQUIPMENTS TO SIMULATE FIELD CONFIGURATIONS FOR TEST DATA COLLECTION & EVALUATION OF EXISTING EQUIPMENT PROPAGATION INTERFACE PROBLEMS ANTENNA TEST FACILITY & SHIELDED ROOMS FOR MEASURING OF & ESTABLISHING DOD STANDARDS FOR ELECTROMAGNETIC COMPATIBILITY RADIATION & PROPAGATION

# INSTALLATION CONSTRUCTION ENGINEERING RESEARCH LABORATORY URBANA, IL.

DIR. R.W. REISACHER DEPUTY DIR. R.L. SHAFFER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	5.873	5.960
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.531	0.315
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	6.404	6.275
TOTAL INHOUSE	5.069	3.977
TOTAL INHOUSE RDT&E	4.701	3.712
ANNUAL OPERATING COST	1.676	1.757

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	
MILITARY	3	0	4	1
CIVILIAN	168	33	94	74
TOTAL	171	33	98	75

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN		OTHER	REAL PROP
15	68.875	32.075	0.000	100.950	3.481	1.961

## ...MISSION

PLAN, EXECUTE AND EVALUATE RESEARCH TO OBTAIN THE BEST COMBINATION OF ENGINEERING, DESIGN, CONSTRUCTION, OPERATION AND MAINTENANCE TO PROVIDE FACILITIES FOR THE MILITARY ESTABLISHMENT AND OTHER AGENCIES AND TO DISSEMINATE THE RESEARCH RESULTS

## ...CURRENT IMPORTANT PROGRAMS

DEVELOPMENT OF MATERIALS FOR PERMANENT MILITARY CONSTRUCTION  
ENVIRONMENTAL QUALITY FOR MILITARY CONSTRUCTION AND FACILITIES OPERATION  
INDUSTRIALIZED BUILDINGS FOR MILITARY CONSTRUCTION APPLICATIONS  
DEVELOPMENT OF IMPROVED DESIGN, CONSTRUCTION AND MANAGEMENT TECHNIQUES  
EVALUATION OF ELECTROMECHANICAL SYSTEMS FOR MILITARY FACILITIES

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

CONTROLLED ENVIRONMENT CHAMBER, 1-MILLION POUND CLOSED-LOOP MATERIALS TEST SYSTEM, SCANNING ELECTRON MICROSCOPE, 10MW RESISTANCE LOAD BANK AND INSTRUMENTATION, X-RAY EQUIPMENT, SEMI-AUTOMATIC WELDING EQUIPMENT, BIAXIAL SHOCK TEST MACHINE, NON-DESTRUCTIVE TESTING FACILITY, VACUUM INDUCTION FURNACES, METALLOGRAPHIC SAMPLE PREPARATION AND RESEARCH METALLOGRAPH X-RAY DIFFRACTION AND VACUUM SPECTROSCOPY SYSTEM, DYNAMIC TENSION ANALYSIS SYSTEM, DIGITAL RECORDING AND ANALYSIS EQUIPMENT  
FACILITIES CAPABILITIES INCLUDE SYSTEMS BUILDING METHODS AND TECHNIQUES, COMPUTER BASED DESIGN AND CONSTRUCTION MANAGEMENT TECHNIQUES, HARDENED FACILITIES ANALYSIS ENVIRONMENTAL QUALITY MANAGEMENT, POLLUTION CONTROL AND ABATEMENT, MILITARY HOUSING SYSTEMS, POWER GENERATION SYSTEMS, AND UTILITIES SYSTEMS ANALYSIS AND EVALUATION

# INSTALLATION DESERET TEST CENTER (LABS)

DUGWAY, UTAH

C.O. COL ROBERT A. SHADE SCIENTIFIC DIR. M. A. ROTHENBERG

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972	1973
	(ACTUAL)	(ACT + EST)
TOTAL RDT&E	13.491	10.786
TOTAL PROCUREMENT	0.493	0.300
TOTAL O&M	0.393	0.395
TOTAL OTHER	1.430	1.320
TOTAL ANNUAL LAB	15.807	12.801
TOTAL INHOUSE	14.617	11.806
TOTAL INHOUSE RDT&E	12.666	10.111
ANNUAL OPERATING COST	6.783	6.193

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED	TOTAL	TOTAL	NON-
	STRENGTH	PHDS	PROF	PROF
MILITARY	355	8	117	238
CIVILIAN	887	15	130	757
TOTAL	1242	23	247	995

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
840910	85.891	130.051	1743.102	1959.044	49.608	21.856

## ...MISSION

DTC PLANS & CONDUCTS APPROVED TESTS TO ASSESS THE MILITARY VALUE OF CML WEAPONS & CML-BIO DEF SYS. TESTS SPT R & D & PROVIDE A BASIS FOR DEVELOPMENT OF NEW OPERATIONAL & LOGISTICAL CONCEPTS FOR EMPLOYMENT OF TESTO SYS. TESTS ARE RESPONSIVE TO USER REQUIREMENTS.

## ...CURRENT IMPORTANT PROGRAMS

ANALYSIS OF FIELD TEST SAMPLES G.ENGINEERING TESTIN  
DEVELOP OF ANALYTICAL PRO, AEROSOL SAMPL, CML & BIO SIMULANT AGENTS.  
DETERMINATION OF THE FATE, PERSISTENCE & METABOLISM OF CML AGENTS.  
ECOLOGICAL EPIDEMIOLOGICAL & TOXICOLOGICAL SURVL OF THE DPG PERIMETER.  
DEVELOP OF NEW TECHNQ FOR TEST PROP OF SIMULANT BIO AGT CLOUDS.

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

MODERN CML ANALYTICAL, MICRO-ANALYTICAL & RSCH LABORATORY FOR MASS ASSAY & SPECIAL STUDIES WITH 7 GAS CHROMATOGRAPHS, MASS INFRA-RED, NUCLEAR MAGNETIC RESONANCE, ULTRA-VIOLET, VISIBLE, ATOMIC ABSORPTION, FLUORESCENCE SPECTROMETRIC EQUIP, 3 ROBOT CHEMIST ANALYZERS, AUTOMATIC SPOT SIZER/COUNTER & BACTERIAL COLONY COUNTER, FMALE PHOTOMETRIC DETECTORS, RADIO ISOTOPE EQUIP, SCIENTIFIC GALSS BLOWING SHOP, AEROSOL & ENVIRONMENTAL CHAMBERS, AIRBORNE PARTICLE SIZING & LIGHT-SCATTERING PHOTOMETERS, LOW-HIGH SPEED & ULTRA CENTRIFUGES FOR PREP & ANALYSIS, ELECTRON MICROSCOPE, MICROBIAL FERMENTATION CAPABILITY EUNDER IMPLEMENTATION. MICRO-BIOLOGICAL, IMMUNOLOGICAL, EPIDEMIOLOGICAL & ECOLOGICAL LABORATORY FOR FIELD WORK & RESEARCH. FACILITIES FOR LARGE, SMALL AND WILD TEST ANIMALS.



INSTALLATION EDGEWOOD ARSENAL LABS

EDGEWOOD ARSENAL, MD.

C.O. COL JOHN K. STONER TECH. DIR. DR. B.L. HARRIS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	33.205	25.044
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	3.915	3.700
TOTAL OTHER	1.960	1.960
TOTAL ANNUAL LAB	39.080	30.704
TOTAL INHOUSE	36.760	28.660
TOTAL INHOUSE RDT&E	30.885	23.000
ANNUAL OPERATING COST	14.602	14.638

PERSONNEL	PERSONNEL DATA (END OF FY 1972)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	196	61	146		50
CIVILIAN	1123	65	557		566
TOTAL	1319	126	703		616

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)				REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
4055	496.713	97.329	148.154	742.196	16.899	8.900

#### ...MISSION

CLASS II ACTIVITY CONDUCTING A RESEARCH AND DEVELOPMENT MISSION FOR ARMY CHEMICAL MUNITIONS AND DEFENSIVE ITEMS. INCLUDES BASIC RESEARCH AND GENERAL INVESTIGATIONS AS WELL AS EXPLORATORY, ADVANCED AND ENGINEERING DEVELOPMENT OF MATERIAL.

#### ...CURRENT IMPORTANT PROGRAMS

PROPHYLAXIS AGAINST AND TREATMENT OF CHEMICAL AGENT CASUALTIES  
CHEMICAL AGENT ALARM TECHNIQUES  
PHYSICAL PROTECTION AGAINST CHEMICAL ATTACK  
BINARY LETHAL CHEMICAL AGENT PROJECTILE DEVELOPMENT  
DEVELOPMENT OF MODULAR COLLECTIVE PROTECTION EQUIPMENT

#### ...FUNCTIONS/EQUIPMENT/CAPABILITIES

CONDUCT DOD RSCH OF ANTIPERS CML AGTS & ON VEGETATION CONTROL AGENTS / TOXICOLOGY-PHYSIOLOGY & PHARM OF CML COMPOUNDS & ANTIPERS-ANTIMAT FLAME INCEND AGTS / DA RSCH OF DEFENSE AGAINST CML ATTACK & DISSEM-DISPERISON OF CML MUNITIONS / AERODYNAMICS RSCH / INVEST SIMULANTS & TRNG AGENTS / DEV CML AGT PROCESS-TEST & ASSESS TECHNOLOGY / DEV CIVIL DISTRUB-RIOT CONTROL SYS / INTELLIGENCE EXPLOITATION / DEV PROT EQUIP & WNG-DETECT MAT FOR DEF AGAINST CML ATTACK & DEV CML AGENT MUNITIONS SYSTEMS. MAJOR EQUIP IS CONTAINED IN A COMPLEX OF ENGR & LAB AREAS & INCLUDES CML PILOT PLTS-MUN FILLING-ENGR DESIGN & EXP FAB SHOPS& AEROSOL DISSEM TEST CHAMBERS&PYROTECH MIXING-LOADING & HANDLING FAC&INDOOR BALLISTIC RANGE&SUBSONIC-SUPERSONIC & TRANSONIC WIND TUNNELS& A COMPLETE CLINICAL RESEARCH FACILITY & AN ANIMAL BREEDING & HOLDING FACILITY.

# INSTALLATION ELECTRONIC PROVING GROUND

FT. HUACHUCA, AR.

C.O. COL WALLACE D. ENDERLE CH. SCI./TECH. DIR. DR. GEORGE E. SCHAFER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972	1973
	(ACTUAL)	(ACT + EST)
TOTAL RDT&E	9.175	8.035
TOTAL PROCUREMENT	2.269	1.860
TOTAL O&M	0.152	0.166
TOTAL OTHER	3.133	3.399
TOTAL ANNUAL LAB	14.729	13.460
TOTAL INHOUSE	9.685	11.215
TOTAL INHOUSE RDT&E	4.640	6.180
ANNUAL OPERATING COST	2.048	1.900

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED	TOTAL	TOTAL	NON-
	STRENGTH	PHDS	PROF	PROF
MILITARY	358	0	96	262
CIVILIAN	227	2	101	126
TOTAL	585	2	197	388

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
19431	0.000	187.580	0.000	187.580	3.320	27.876

...MISSION  
PLAN, CONDUCT, AND REPORT ON ENGR TESTS, CHECK TESTS, INITIAL PRODUCTION TESTS, APPROP PREPRODUCTION TESTS, ASSIGNED SERVICE TESTS, AND SENSOR TESTS. SERVICE TESTS PERTAIN TO COMM-ELECTRONICS EQUIP AND SYSTEMS ABOVE DIVISION LEVEL.

...CURRENT IMPORTANT PROGRAMS  
METHODS OF MEASURING REFRACTIVITY ERROR  
AUTOMATIC TEST EQUIPMENT FOR COMMUNICATIONS ELECTRONICS  
INFRARED SYSTEM SENSITIVITY STUDY FOR 1972-80  
INFRARED OPTICAL EVALUATION DATA CONTROL SYSTEM  
INFRARED OPTICAL PROPAGATION STUDY

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
OPERATES THE USA ELECTRONIC PROVING GROUND TO INCLUDE AN ELECTROMAGNETIC ENVIRONMENTAL TEST FACILITY, AN ELECTRONIC COUNTERMEASURES VULNERABILITY TEST FACILITY AND A SYSTEM TEST FACILITY. PROVIDE ADVICE TO PROPONENT AGENCIES AND MATERIEL DEVELOPERS DURING DEVELOPMENT OF MATERIEL-CONDUCT OTHER TESTS AND EVALUATIONS AS DIRECTED BY THE CGTECOM

# INSTALLATION ELECTRONIC WARFARE LABORATORY

FT. MCNMOUTH, N.J.

C.O. AND DIR. COL JAS D. DONNELLY DEPUTY DIR. C.K. SHULTES

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	32.228	33.881
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.332	0.345
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	32.560	34.226
TOTAL INHOUSE	15.312	14.217
TOTAL INHOUSE RDT&E	14.980	13.872
ANNUAL OPERATING COST	3.748	3.770

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	63	0	40	23
CIVILIAN	384	4	191	193
TOTAL	447	4	231	216

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
0	61.311	40.868	10.850	113.029	2.525	13.880

## ...MISSION

ECOM R&D ESSENTIAL TO ELECTRONIC WARFARE & SELECTED AREAS OF INTELL. ENCOMPASSES APPLD R&D (INCL QRC DEV)&SPT IN INTERCEPT,DF,SIG ANALY, JAMMING,DECEPT,SIG INTELL,ACOUST INTELL,AGENT EQUIP,SECURITY,CNTR INTEL, VULNERABILITY AND COUNTER COUNTERMEASURES.

## ...CURRENT IMPORTANT PROGRAMS

PROTECTION OF ARMY AIRCRAFT  
ASA EW/SIGINT PROGRAM-ARDF  
MISSILE ELECTRONIC WARFARE  
PROTECTION OF COMBAT VEHICLES  
QRC READINESS

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

ECM EQUIP & DEVICES R&D FACILITY,MISSILE EW,DF TEST FACILITY,MAJOR EQUIP VT FUZE SIMULATOR,LASERS,RTMS,ABN ECM LABS,IR TEST RANGE,ECM TEST RANGE, ANECHOIC CHAMBER,ANTENNA PATTERN RANGE,20MHZ-40GHZ,CAPABILITIES CONCEIVE ,DESIGN,DEVELOP ECM AGAINST C-E EQUIP.CONCEIVE,DESIGN,DEVELOP NEW EW SYS FOR SIGINT,ELINT,COMINT,QRC APPLICATIONS.MEASURE VUL TO ECM OF ARMY GUIDED MISSILES.PROVIDE LINEAR,SQUARE ROOT,LOG ANTENNA PATTERN PRESENTATIONS.

# INSTALLATION ELECTRONICS TECHNOLOGY AND DEVICES LAB

FT. MONMOUTH, N.J.

DIR. DR. HANS K. ZIEGLER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	21.953	11.876
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.139	0.058
TOTAL ANNUAL LAB	22.092	11.934
TOTAL INHOUSE	12.393	7.172
TOTAL INHOUSE RDT&E	12.254	7.114
ANNUAL OPERATING COST	2.218	1.983

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	13	1	5	8
CIVILIAN	475	55	302	173
TOTAL	488	56	307	181

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
279	142.900	8.100	0.000	151.000	5.832	12.482

## ...MISSION

PLANS AND CONDUCTS EXPLORATORY R AND D OF ELECTRONIC MATERIALS, PARTS AND DEVICES ASSEMBLIES AND RELATED DISCIPLINES AND TECHNIQUES APPLICABLE TO EQUIPMENTS AND SYSTEMS. CONDUCTS RESEARCH IN THE PREPARATION, COMPOSITION, STRUCTURE AND PROPERTIES OF ELECTRONIC MATERIALS AND RELATED PHENOMENA.

## ...CURRENT IMPORTANT PROGRAMS

RESEARCH IN ELECTRONICS, PHYSICS, CHEMISTRY, MATHEMATICS, & NUCLEAR PHYSICS EXPLORATORY DEVELOPMENT OF ELECTRONIC DEVICES, MATERIALS, TECHNIQUES AND ASSEMBLIES. R AND D OF BATTERIES, CHARGERS, POWER CONDITIONING, THERMAL ENERGY AND FUEL CELLS. R AND D OF GENERAL PURPOSE TEST EQUIPMENT FOR ELECTRONIC SYSTEMS.

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

FACILITIES ARE AVAILABLE FOR PERFORMING EXPLORATORY RESEARCH IN PHYSICS AND CHEMISTRY OF MATERIALS AND FOR CONDUCTING R AND D ON ELECTRONIC PARTS DEVICES, INTEGRATED CIRCUITS AND ASSEMBLIES. LABORATORIES FOR PERFORMING R AND D IN THESE AREAS ARE EQUIPPED WITH THE NORMAL COMPLEMENT OF STD. LAB INSTRUMENTATION AND FACILITIES. WORK AREAS INCLUDE FACILITIES FOR THE COMPLETE FABRICATION AND TESTING OF INTEGRATED CIRCUITS AND ASSEMBLIES SEMICONDUCTOR DEVICES, ELECTRON TUBES, DISPLAY, STORAGE AND PICKUP DEVICES. ALSO FOR R AND D IN ALL TYPES OF PRIMARY, SECONDARY AND SPECIAL PURPOSE POWER SOURCES, ELECTRONIC MATERIAL CHARACTERIZATION. FACILITIES ARE AVAILABLE FOR STUDYING THE EFFECTS OF NUCLEAR RADIATION ON ELECTRONIC MATERIALS. WORLD WIDE TRACKING STATIONS ARE AVAILABLE FOR STUDYING EFFECTS OF SOLAR RADIATION AND IONOSPHERIC PHENOMENA ON ELECTROMAGNETIC PROPAGATION

# INSTALLATION ENGINEER TOPOGRAPHIC LABORATORIES

FT. BELVOIR, VA.

C.O. COL JOHN E. WAGNER TECH. DIR. GILBERT G. LORENZ

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	13.256	10.759
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.155	0.262
TOTAL ANNUAL LAB	13.411	11.021
TOTAL INHOUSE	5.800	6.968
TOTAL INHOUSE RDT&E	5.615	6.706
ANNUAL OPERATING COST	0.551	0.560

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	25	1	12	13
CIVILIAN	265	21	169	96
TOTAL	290	22	181	109

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN		OTHER	REAL PROP
0	55.899	10.828	3.700	70.427	0.000	11.477

...MISSION  
ACCOMPLISHES RESEARCH AND DEVELOPMENT OF SYSTEMS, EQUIPMENT, PROCEDURES AND TECHNIQUES APPLICABLE TO MAPPING, SURVEYING, GEODESY, PHOTO INTERPRETATION AND ANALYSIS OF ENVIRONMENTAL DATA RELEVANT TO MILITARY OPERATIONS AND MATERIEL DEVELOPMENT.

...CURRENT IMPORTANT PROGRAMS  
DEVELOPMENT OF SEMI-AUTOMATIC CARTOGRAPHIC SYSTEM  
DEVELOPMENT OF AN ALL-WEATHER RADAR MAPPING SYSTEM  
DEVELOPMENT OF MILITARY GEOGRAPHIC INTELLIGENCE CONCEPTS AND SYSTEMS  
DEVELOPMENT OF A LONG-RANGE POSITION DETERMINING SYSTEM  
DEVELOPMENT OF A POSITION AND AZIMUTH DETERMINING SYSTEM

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
FACILITIES INCLUDE AN EXPERIMENTAL CARTOGRAPHIC LABORATORY TO STUDY THE PROBLEMS ASSOCIATED WITH HANDLING DIGITAL CARTOGRAPHIC DATA, A PHOTOGRAPHIC PROCESSING LABORATORY TO SUPPORT INVESTIGATIONS OF COLOR PHOTOGRAPHY, A MENSURATION LABORATORY FOR PRECISE MEASUREMENT OF IMAGE COORDINATES REQUIRED IN ANALYSIS OF DATA REDUCTION SYSTEMS, A LASER ROOM WITH FOUR LASERS AND AN AIR SUPPORTED TABLE FOR HOLOGRAPHIC INVESTIGATIONS, AN ELECTRONICS LABORATORY THAT CAN ANALYZE CIRCUITS FROM DC TO 40 GHZ, AND A CHEMISTRY LABORATORY TO SUPPORT ANALYSIS OF THE IMAGE REPRODUCTION PROCESS. COMPUTATIONAL CAPABILITIES INCLUDE A FULL DUPLEX INPUT TO THE NATIONAL BUREAU OF STANDARDS UNIVAC 1108 WITH A PLANNED CHANGE OVER IN 1973 TO THE CDC 6600 AT FORT BELVOIR, VIRGINIA.

# INSTALLATION ENGINEER WATERWAYS EXPERIMENT STATION

VICKSBURG, MISS.

DIR. COL ERNEST D. PEIXOTTO TECH. DIR. F.R. BROWN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	14.451	14.650
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.399	0.470
TOTAL OTHER	10.084	16.707
TOTAL ANNUAL LAB	24.934	31.827
TOTAL INHOUSE	22.073	26.070
TOTAL INHOUSE RDT&E	12.469	11.771
ANNUAL OPERATING COST	4.109	4.807

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	58	3	42	16
CIVILIAN	1197	36	355	842
TOTAL	1255	39	397	858

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)				REAL PROP	EQUIP
	LAB	ADMIN	OTHER	TOTAL		
2009	1391.000	338.596	192.133	1921.729	15.080	24.852

## ...MISSION

MIL&CIV FUNDED ENGR RSCH DEV&INVES IN HYD.ECOLOGY,PERM&EXPEDIENT PAVE-  
MENTS,SOIL,CONCRETE,EXPLO WPN EFF,EXPLO EXCAVATION,VEH MOBILITY&ENVIRON-  
MENT ASPECTS OF MIL OP.CONSULTANT SVC&TECH LIBRARY.TECH SURVL OF CEMENT  
AND POZZOLAN TEST PROG.SERVES CE,AMC,DNA,AEC,OCD,AF,NAVY&OTHER AGENCIES.

## ...CURRENT IMPORTANT PROGRAMS

HYD&MATH MODELING TO SOLVE RIVER,TIDAL,WIND-WAVE,ECOLOGICAL&STRUC PROBS.  
INVES MEANS OF ACQUIRING TERRAIN DATA BY USE OF VARIOUS SENSING DEVICES.  
NUC&HE RSCH TO DEV/ CRITERIA FOR ED OF PROTECTIVE STRUC BOTH UGND&UWTR.  
RSCH,DEV&FORMULATION OF NEW&IMP ENG CRITERIA ON ROADS,STORAGE AREAS,AIR-  
FIELDS&HELIPORTS.INVES OF CEMENTITIOUS MAT&RSCH OF MASS&STRUC CONCRETE.

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

CDT RDT&E FOR MANY SPONSORS,PERF GEN INVES IN FLD OF HYD,SOIL MECH,CON-  
CRETE,MOBILITY OF MIL VEH,EXPLO EFF,ECOLOGY,EXPLO EXCAVATION&PAVEMENTS.  
THRU BR&APPLIED RSCH IN THESE FLD&RLT FLD,THE DEV OF METHODS&TECHNIQUES  
AND THE TESTING OF MAT&EQUIP,ASST IN ALOMPMT OF THE CIV WORKS&MIL MSN  
OF CE.WES RESERVATION CNTN BLOGS,TEST SITES,SPECL EQUIP&OTHER PLANT FAC.  
TEST SITES&FAC FOR SP PURPOSES ARE MAINT IN OTHER AREAS ON PERM OR YEMP  
BASIS.FAC INCL FLUMES OF DIFF TYPES&SIZES,WAVE&TIDE GENR MACH,DRILL  
EQUIP,FULLY EQUIPED SOILS LAB,X-RAY DIFFRACTION AND SPECTROSCOPY APPAR,  
FULLY EQUIPED CONCRETE LAB,LARGE&SMALL BLAST LOAD GENERATOR,200K DYNAMIC  
LOADER,MOBILITY TEST CARTS,SINGLE&MULTIPLE WHEEL LOAD CARTS FOR TFC,SUR  
EFF BLAST FAC,HIGH&LOW FREQ VIBRATORS,ELECTRON MICROSCOPE,PHYS TREATMENT  
LAB,CALBR LAB,ELCT LAB,LARGE SCALE CMPT FAC& A TECHNICAL LIBRARY.

# INSTALLATION FIELD ARTILLERY BOARD

FT. SILL, OK.

PRES. COL ROBERT T. BLAKE

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972	1973
	(ACTUAL)	(ACT + EST)
TOTAL RDT&E	1.466	1.550
TOTAL PROCUREMENT	0.054	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	3.254	3.400
TOTAL ANNUAL LAB	4.774	4.950
TOTAL INHOUSE	4.682	4.818
TOTAL INHOUSE RDT&E	1.424	1.418
ANNUAL OPERATING COST	0.250	0.283

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	388	0	103	285
CIVILIAN	43	0	1	42
TOTAL	431	0	104	327

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)				REAL PROP	EQUIP
	LAB	ADMIN	OTHER	TOTAL		
23	26.286	47.135	56.138	129.559	3.330	2.622

...MISSION  
 PLAN CONDUCT AND REPORT ON ST AND CK OF FA MAT PARTICIPATE IN ET IPT  
 AND PI AS DIR ADVISE PROPONENT AGENCIES AND MAT DEVELOPERS DURING  
 DEVELOPMENT OF FA MAT FROM DATA AND INFO DERIVED FROM TEST EXPERIENCE  
 CONDUCT OTHER TESTS AND EVAL AS DIRECTED BY CG TECOM

...CURRENT IMPORTANT PROGRAMS  
 EXPANDED SERVICE TEST TACFIRE  
 EXPANDED SERVICE TEST LANCE MISSILE SYSTEM AND XM234 WARHEAD SECTION  
 EXPANDED SERVICE TEST XM198 HOW  
 EXPANDED SERVICE TEST MET DATA SOUNDING SYSTEM  
 EXPANDED SERVICE TEST M110E2 HOW

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
 THREE 105MM HOW TWO 155MM HOW ONE 8IN HOW/175MM GUN ONE AN MPQ4 RADAR  
 ONE MET STATION AND MAINTENANCE AND EVALUATION FACILITIES TO DO UP TO  
 GS MAINT ON TEST ITEMS ADDITIONAL SUPPORT WHEN NEEDED IS OBTAINED  
 FROM USAFACFS

INSTALLATION FRANKFORD ARSENAL LABS

PHILADELPHIA, PA.

C.O. COL JAMES L. WALLACE TECH. DIR. DR. SIDNEY ROSS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	32.246	21.027
TOTAL PROCUREMENT	3.026	9.028
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.083	0.057
TOTAL ANNUAL LAB	35.355	30.112
TOTAL INHOUSE	26.244	24.827
TOTAL INHOUSE RDT&E	23.135	15.742
ANNUAL OPERATING COST	4.534	4.668

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	31	2	22	9
CIVILIAN	1609	38	724	885
TOTAL	1640	40	746	894

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
43	558.000	134.000	557.000	1249.000	0.970	8.891

...MISSION  
COMMODITY CENTER SMALL CAL AMMO, PROPELL ACT DEVICES, MULTIPURP TEST EQ,  
FIRE CONTROL EQUIP, NON-FERR METALS, MATERIAL DEGRAD, MYCOLOGY, POWER TRANS  
FLUIDS, SYNTH LUBS, PROPELLANTS, EXPLOS, PYROTECH, LASER COUNTERMEASURES,  
R&D TRACER, AMMO DESIGN, DEVELOP ARTY METAL PARTS, MECH TIME FUZE.

...CURRENT IMPORTANT PROGRAMS  
ARMY SMALL CALIBER AMMUNITION RESEARCH AND ENGINEERING PROGRAM,  
SMALL CALIBER AMMUNITION MODERNIZATION PROGRAM,  
FIRE CONTROL FOR- AIRCRAFT, ANTIAIRCRAFT, ARTILLERY, COMBAT VEHICLES,  
TEST MEASUREMENT AND DIAGNOSTIC EQUIPMENT,  
LASER COUNTERMEASURES AND PROTECTION RESEARCH AND EXPLORATORY DEVL.

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
RAPID SCAN SPECTROPHOTOMETER, PILOT PLANT TRACER LOADING FACILITY, OPTICAL  
LAB&DESIGN FACILITY SHOP, LASER TEST FACILITY, SOLID STATE PHYSICS LAB,  
ELECTRON MICROSCOPE, CRYSTAL GROWING EQUIP, ELECTRON BEAM VACUUM FILM DE-  
POSITION EQUIP, DYNAMIC PHOTOELASTIC STRESS ANALYSIS EQUIP, AIR GUN FACIL-  
ITY, SPACE&ATMOSPHERIC SIMULATOR, CDC BATCH TERMINALS, HYDRAUL&MECH POWDER  
MOLD EQUIP, VAC-ARC MELTING FURNACES, MICROSCAN X-RAY ANALYZER, RADIO-ISO-  
TOPE LAB, MICROBIOLOGY LAB, TROPICAL CLIMATE ROOM, EPR SPECTROMETER, DIFF  
SCAN CALORIMETER, PROPELLANT PROCESSING LAB, SPECIAL EQUIP FOR IGNITION &  
PYROTECH R&D, 15 FIRING RANGES, AIRBORNE FIRE CONTROL TEST EQ, 4 PADS FOR  
POINT FUZE DETONATION, BALLISTIC MEAS EQUIP, DOPPLER RADAR SPECTRA PHOTO-  
METER, K-BAND MICROWAVE INTERFEROMETER, MICROWAVE ANALCHOIC CHAMBER, AUTO-  
MATIC CHECK-OUT EQUIP&LAB, HOLOGRAPHIC EQUIP, VERTICAL TEST TOWERS.



# INSTALLATION HARRY DIAMOND LABORATORY

WASHINGTON, D.C.

C.O. COL DAVID W. EINSEL TECH. DIR. BILLY M. HORTON

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	45.986	42.806
TOTAL PROCUREMENT	19.810	16.566
TOTAL O&M	11.412	13.355
TOTAL OTHER	0.575	0.364
TOTAL ANNUAL LAB	77.783	73.091
TOTAL INHOUSE	40.845	28.773
TOTAL INHOUSE RDT&E	33.530	25.462
ANNUAL OPERATING COST	10.430	11.044

PERSONNEL	PERSONNEL DATA (END OF FY 1972)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	9	1	6		3
CIVILIAN	1505	61	533		972
TOTAL	1514	62	539		975

ACRES	SPACE AND PROPERTY				COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)						
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP	
2770	281.602	46.119	54.154	381.875	11.874	23.299	

## ...MISSION

PROX FUZES FOR NUCLEAR ARTILLERY & MISSILES & FOR AIR TARGETS & MULTI-  
OPTION FUZE FOR MORTARS/NUCLEAR EM PULSE & TRANSIENT RADIATION EFFECTS/  
WEAPONRY & PERSONNEL DETECTION RADARS/FLUORICS/ELECT COMPONENT RELIABI-  
TY & AUTOMATED PRODUCTION & TELEMETRY & ECCM\*

## ...CURRENT IMPORTANT PROGRAMS

RD&E ON ELECTRONIC FUZING INCL PROXIMITY & TIME & COMMAND & MULTIOPTION/  
LEAD LAB FOR NUCLEAR WEAPONS EFFECTS & FLUIDICS/WEAPON SYS ANALYSIS &  
SYNTHESIS/INSYUMENTATION & ENVIRONMENTAL SIMULATION/RESEARCH IN BASIC  
ELECT & ENERGY CONVERSION & RADIATION PHYSICS & FLUIDICS & ELECTRO-  
OPTICS & BASIC SCIENCES\*

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

SIMULATORS TO DETERMINE SUSCEPTIBILITY OF WEAPON SYSTEMS TO NUCLEAR  
WEAPONS EFFECTS & TO ESTABLISH HARDENED DESIGNS/PULSED NUCLEAR REACTOR &  
HIGH INTENSITY X RAY /AN EXTREMELY LARGE DOSE & VOLUME GAMMA RAY  
GENERATOR AURORA & BICONIC ELECTROMAGNETIC PULSE EMP DEVICE & LARGE  
TRANSPORTABLE EMP SIMULATOR TEMPS FOR HIGH ALTITUDE & THREAT LEVEL  
ENVIRONMENT SIMULATION/ARTILLERY SIMULATOR TO EVALUATE EFFECTS OF FIRING  
FORCES/LATITUDE MAGNETIC SIMULATOR FOR ANTITANK SIGNATURE ANALYSIS/INFRA  
RED DARK TUNNEL/ANTENNA TEST RANGE/RADAR TEST SITE/ HIGH PRESSURE SHOCK  
TUBES FOR STUDY OF HIGH TEMP GASES/ MERCURY ARC PLASMA TUBE & OPTICAL &  
SPECTROSCOPIC EQUIPMENT\*

# INSTALLATION HUMAN ENGINEERING LABORATORY

ABERDEEN PROV GR, MD.

DIR. DR. JOHN D. WEISZ EXEC. LTC RICHARD D. KAVANAUGH

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972	1973
	(ACTUAL)	(ACT + EST)
TOTAL RDT&E	3.208	3.330
TOTAL PROCUREMENT	0.071	0.000
TOTAL O&M	0.056	0.036
TOTAL OTHER	0.294	0.305
TOTAL ANNUAL LAB	3.629	3.671
TOTAL INHOUSE	3.253	3.343
TOTAL INHOUSE RDT&E	2.832	3.002
ANNUAL OPERATING COST	1.330	1.379

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	
MILITARY	30	1	19	11
CIVILIAN	100	10	53	47
TOTAL	130	11	72	58

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
10	26.500	17.605	28.953	73.058	0.709	2.600

...MISSION  
 CONDUCT BASIC AND APPLIED RESEARCH IN HUMAN FACTORS ENGINEERING  
 DEVELOP NEW HUMAN FACTORS ENGINEERING METHODOLOGY  
 ESTAB AND OPERATE A MPR CHARACTERISTICS DATA BANK  
 INTGR ALL MPR CHARACTERISTICS INTO ARMY MAT DEVELOPMENT PROGRAM

...CURRENT IMPORTANT PROGRAMS  
 HUMAN ENGR LAB ARMOR SYSTEMS TESTS, HELAST  
 COMBAT-LIKE PSYCHOLOGICAL STRESS EFFECTS  
 SHORT RANGE MANPORTABLE ANTITANK WEAPON TECHNOLOGY  
 HUMAN FACTORS ENGR IN SPT OF AIR MOBILITY  
 NOISE ABATEMENT

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
 FIXD WING FLIGHT SIMULATORS  
 HELICOPTER SIMULATORS - WHIRLYMITE  
 COMMAND AND CONTROL INFORMATION HANDLING SIMULATORS  
 ANECHOIC CHAMBER  
 PHYSIOLOGY LABORATORY WITH INSTRUMENTATION  
 SMALL ARMS TEST FIRING RANGE  
 ANIMAL SURGICAL FACILITY  
 NOISE MEASUREMENT AND ANALYSIS INSTRUMENTATION  
 WOOD AND METAL WORKING TEST SUPPORT CAPABILITY  
 BODY ARMOR TEST SITE  
 CENTRAL NERVOUS SYSTEM OUTPUT RECORDING INSTRUMENTATION  
 HUMAN PERFORMANCE DATA BANK

# INSTALLATION INFANTRY BOARD

FT. BENNING, GA.

PRES. COL WALTER E. MEINZEN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	1.294	1.296
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	1.452	1.903
TOTAL ANNUAL LAB	2.746	3.199
TOTAL INHOUSE	2.631	3.153
TOTAL INHOUSE RDT&E	1.179	1.250
ANNUAL OPERATING COST	0.185	0.185

PERSONNEL	PERSONNEL DATA (END OF FY 1972)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHOS	TOTAL PROF		
MILITARY	184	0	22		162
CIVILIAN	55	0	2		53
TOTAL	239	0	24		215

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
14959	0.000	50.053	28.576	78.629	0.500	0.360

## ...MISSION

PLAN CONDUCT & REPORT TESTS RELATED TO SUITABILITY OF EQUIP FOR ARMY USE  
PERFORM CUSTOMER TESTS TO EXPEDITE DEVELOPMENT & PROCUREMENT TEST PRGS  
CONTROL PROGRAM ON TEST METHODOLOGY INSTRUMENTATION AND FACILITIES  
PROVIDE ADVICE TO DEVELOPERS DURING THEIR DEVELOPMENT OF INFANTRY EQUIP

## ...CURRENT IMPORTANT PROGRAMS

EXPANDED SERVICE TEST MEDIUM ANTITANK ASSAULT WEAPON XM47 URAGON  
STUDY TO IMPROVE TEST METHODOLOGY AND DEVELOPE INSTR TEST FACILITIES  
SERVICE TESTS OF NIGHT VISION SIGHTS ANPVS-4  
DESERT CLOTHING SYSTEM  
SERVICE TEST LIGHT WEIGHT LOADCARRYING EQUIPMENT

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

SERVICE TEST EQUIP & ANCILLARY ITEMS USED BY INF FOR FIRE POWER TARGET  
ACQUISITION GROUND SURVEILLANCE FIRE CONTROL & GROUND MOBILITY FIELD  
CLOTHING EQUIP & RATIONS AP MINES CB EQUIP FOR INDIVIDUALS & SMALL UNITS  
AIRBORNE TEST OF EQUIP WORN OR CARRIED BY PARACHUTISTS WHILE JUMPING  
PROVIDE REPRESENTATION FOR IN-PROCESS REVIEWS  
ASSIST IN PREPARATION OF AND REVIEW MATERIEL NEEDS  
PLAN DIRECT AND CONTROL PROGRAM IN TEST METHODOLOGY & INSTRUMENTATION  
EVALUATE & MAKE RECOMMENDATIONS CONCERNING SUITABILITY AND SAFETY OF  
TEST ITEMS FOR OPERATIONAL USE  
KNOWN DISTANCE SMALL ARMS RANGE MORTAR RANGE & INSTRUMENTED ANTITANK  
RANGE DEFENSE RANGE ATTACK RANGE & QUICK FIRE RANGE CLIMATIC CHAMBER  
CLIMATIC CHAMBER

INSTALLATION INSTITUTE OF DENTAL RESEARCH

WASHINGTON, D.C.

C.O. BG SURINDAR N. BHASKAR

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	0.715	0.866
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.048	0.061
TOTAL OTHER	0.621	0.708
TOTAL ANNUAL LAB	1.384	1.635
TOTAL INHOUSE	1.384	1.635
TOTAL INHOUSE RDT&E	0.715	0.866
ANNUAL OPERATING COST	0.112	0.127

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	56	10	30	26
CIVILIAN	25	1	9	16
TOTAL	81	11	39	42

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
0	7.711	4.722	1.425	13.858	0.000	0.670

...MISSION

CONDUCT CLINICAL INVESTIGATIONS AND RESEARCH IN ETIOLOGY, CONTROL AND PREVENTION OF ORAL DISEASE. DEVELOP SIMPLIFIED TECHNIQUES OF EFFECTIVE TREATMENT INCLUDING MAXILLOFACIAL INJURIES. INVESTIGATE PROPERTIES AND USES OF DENTAL MATERIALS. CONDUCT DENT EDUCATION AND TRAINING PROGRAMS.

...CURRENT IMPORTANT PROGRAMS

WATER LAVAGE.  
RESTORATIVE MATERIALS.  
NITINOL.  
ELECTRO-ANESTHESIA.  
BIODEGRADABLE MATERIALS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

MAJOR EQUIPMENT INCLUDES ELECTRON MICROSCOPES, STRESS/FATIGUE TESTING EQUIPMENT, SPECTROPHOTOMETER, SCINTILLATION COUNTER, LYOPHILIZERS, GAS CHROMATOGRAPH, CRYOSTAT, CRYOSURGERY UNIT, DENTAL OPERATING EQUIPMENT, ULTRACENTRIFUGE, MULTI CHANNEL PHYSIOLOGIC RECORDERS, THERMAL ANALYSIS SYSTEM, MICROS TOOLMAKER, MICROSCOPES AND STERILIZERS. CAPABILITIES INCLUDE FULL SPECTRUM BIOCHEMISTRY, HISTOLOGIC, PATHOLOGIC, MICRO-BIOLOGIC AND ELECTRON MICROSCOPY LABORATORIES, EXTENSIVE METALLURGICAL AND MATERIALS TESTING LABORATORY, ANIMAL SURGERY, DENTAL RESEARCH, AND EDUCATION.

# INSTALLATION INSTITUTE OF SURGICAL RESEARCH

FT. SAM HOUSTON, TX.

C.O. COL BASIL A. PRUITT, JR. TECH. DIR. ARTHUR D. MASON

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	1.435	1.633
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	1.364	1.534
TOTAL ANNUAL LAB	2.799	3.167
TOTAL INHOUSE	2.799	3.167
TOTAL INHOUSE RDT&E	1.435	1.633
ANNUAL OPERATING COST	0.105	0.120

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	127	20	42	85
CIVILIAN	79	3	20	59
TOTAL	206	23	62	144

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL REAL PROP	EQUIP
1	25.424	0.800	19.000	45.224	1.968	0.968

## ...MISSION

CONDUCT BOTH CLINICAL AND LABORATORY STUDIES IN TREATMENT OF THERMAL AND TRAUMATIC INJURIES. PROVIDE CARE FOR PATIENTS WITH THESE TYPES OF INJURIES. TRAIN OTHERS IN THE CARE OF SUCH PATIENTS.

## ...CURRENT IMPORTANT PROGRAMS

STUDY OF POST BURN HEMODYNAMIC AND PULMONARY CHANGES.  
CLINICAL AND LABORATORY STUDIES OF INFECTION IN BURN PATIENTS.  
STUDY OF ACUTE RENAL FAILURE AND RENAL PHYSIOLOGY.  
STUDY OF POST BURN HEMATOLOGY AND IMMUNOLOGY.  
METABOLIC CHANGES FOLLOWING BURNS AND EFFECTS OF HYPERALIMENTATION.

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

OPERATES 60 BEDS FOR SERIOUSLY BURNED AND INJURED PATIENTS. PROVIDES CLINICAL LABORATORY SUPPORT AND RESEARCH CAPABILITIES IN THE FIELDS OF PATHOLOGY, ELECTRON MICROSCOPY, MICROBIOLOGY, EXPERIMENTAL SURGERY, RENAL PHYSIOLOGY AND BIOCHEMISTRY. MAINTAINS AN ANIMAL COLONY, ELECTRONIC SHOP, MACHINE SHOP, SURGICAL LIBRARY, AND A METABOLIC CHAMBER.

# INSTALLATION LAND WARFARE LABORATORY

ABERDEEN PROV GR, MD.

C.O. COL R.L. CLARKSON TECH. DIR. DR. R.D. SHELTON

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL ROT&E	8.551	6.300
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.038	0.000
TOTAL OTHER	0.264	0.238
TOTAL ANNUAL LAB	8.853	6.538
TOTAL INHOUSE	5.262	4.673
TOTAL INHOUSE ROT&E	4.996	4.435
ANNUAL OPERATING COST	2.355	2.390

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	16	0	14	2
CIVILIAN	111	3	55	56
TOTAL	127	3	69	58

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN		REAL PROP	EQUIP
80	38.691	2.655	12.628	53.974	0.686	0.712

## ...MISSION

TO PROVIDE A CENTRALIZED QUICK REACTION RESEARCH AND DEVELOPMENT FACILITY FOR ACCOMPLISHING DEVELOPMENT OF SPECIALIZED MILITARY ITEMS AND FOR THE GENERATION OF NEW IDEAS FOR SUCH MATERIAL

## ...CURRENT IMPORTANT PROGRAMS

TACTICAL CAMOUFLAGE AND CONCEALMENT  
HARDWARE IN SUPPORT OF ARCTIC OPERATIONS  
CONTROL OF DRUGS AND CIVIL DISTURBANCE  
TARGET DETECTION AND LOCATION  
SURVIVAL AND IMPROVED COMBAT EFFECTIVENESS OF THE INDIVIDUAL

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

THE USALWL PROVIDES RESEARCH AND DEVELOPMENT ASSISTANCE TO SOLUTION OF FIELD PROBLEMS IN ALL THEATERS AND IN ALL CLIMATES AND GEOGRAPHIES. THE LABORATORY CAPABILITY COVERS ALL MAJOR SCIENTIFIC AREAS. WITH 69 PROFESSIONAL PERSONNEL THE ORGANIZATION CONTAINS 7 SMALL WELL-EQUIPPED WORKING LABS IN COMMUNICATIONS/ELECTRONICS, MUNITIONS, MOBILITY, ENVIRONMENT AND SURVIVAL, APPLIED CHEMISTRY, APPLIED PHYSICS AND BIOLOGICAL SCIENCES. FURTHER, THE LABORATORY HAS INHOUSE DESIGN AND PROTOTYPE FABRICATION CAPABILITY IN METALS AND WOOD. THE ORGANIZATION IS ASSIGNED AN EIGHTY ACRE TEST FACILITY FOR DEVELOPMENTAL TESTING OF PERTINENT ITEMS AND IS LOCATED AT ABERDEEN PROVING GROUND, MARYLAND WHERE MANY MAJOR TESTING FACILITIES ARE READILY AVAILABLE.

INSTALLATION LETTERMAN ARMY INSTITUTE OF RESEARCH

PRESIDIO, S.F., CAL.

C.O. COL WILLIAM A. AKERS TECH. DIR. DR. JAMES R. NEVILLE

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	0.704	0.727
TOTAL PROCUREMENT	0.000	0.000
TOTAL OEM	0.000	0.000
TOTAL OTHER	11.256	12.426
TOTAL ANNUAL LAB	11.960	13.153
TOTAL INHOUSE	1.462	1.706
TOTAL INHOUSE RDT&E	0.704	0.727
ANNUAL OPERATING COST	0.296	0.278

PERSONNEL	PERSONNEL DATA (END OF FY 1972)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	90	19	50		40
CIVILIAN	20	2	10		10
TOTAL	110	21	60		50

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
3	60.102	8.900	0.000	69.002	0.467	2.670

...MISSION

CONDUCTS RESEARCH IN THE FIELDS OF MEDICINE AND DENTISTRY. GUIDES, COORDINATES AND SUPPORTS RESEARCH PROJECTS OF STAFF MEMBERS OF LETTERMAN GENERAL HOSPITAL. SUPPORTS RESEARCH IN HOSPITALS AT CLASS I INSTALLATIONS. MONITORS OTHER RESEARCH AS DIRECTED BY CG, USAMRDC.

...CURRENT IMPORTANT PROGRAMS

ASSULTS AGAINST HUMAN SKIN BY WATER, HEAT, HUMIDITY, FRICTION, INSECTS, BACTERIA, FUNGI, ALONE AND IN COMBINATION. SURVEY OF MAXILLOFACIAL INJURIES, EARLY RESTORATION OF ORAL INTEGRITY, BONE REPAIR, BACTERMIA, HEMORRHAGIC SHOCK. TEST COMPOUNDED RADIO-PHARMACEUTICALS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

LABORATORIES EQUIPPED FOR CUTANEOUS AND ORAL BACTERIOLOGY, BIOCHEMISTRY, BLOOD GAS ANALYSIS, CHROMATOGRAPHY, ENZYMOLOGY, HEMATOLOGY, HISTOLOGY, IMMUNOLOGY, MYCOLOGY, NUCLEAR PHARMACY, ANIMAL PHYSIOLOGY, AND ISOTOPIC SCANNING. THIRTY MILITARY VOLUNTEERS ARE USED IN STUDIES OF DELAYED HYPERSENSITIVITY, FRICTION BLISTERS, FUNGAL SKIN INFECTIONS, MOSQUITO REPELLENTS, PROLONGED WARM WATER IMMERSION AND PRICKLY HEAT RASH. MAINTAIN BREEDING COLONY OF MOEN-CHASE GUINEA PIGS FOR CUTANEOUS DELAYED HYPERSENSITIVITY. BONE GRAFTING, REPAIR, AND HEALING STUDIES EMPLOY ANGER SCINTILLATION CAMERA, PHYSICAL METHODS AND HISTOLOGY. RADIOIMMUNO-ASSAYS OF ANGIOTENSIN I AND III AND RENIN IN CLINICAL USE. OXYHEMOGLOBIN DISSOCIATION VALUES OBTAINABLE IN FIVE MINUTES USING 0.5 MIL BLOOD AND NOW BEING EVALUATED IN MAN.

# INSTALLATION MATERIALS AND MECHANICS RESEARCH CENTER

WATERTOWN, MASS.

C.O. LTC R.B. HENRY DIR. DR. A.E. GORUM

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	27.293	19.475
TOTAL PROCUREMENT	4.534	4.715
TOTAL O&M	1.855	2.189
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	33.682	26.379
TOTAL INHOUSE	15.257	13.233
TOTAL INHOUSE RDT&E	13.173	10.527
ANNUAL OPERATING COST	5.984	6.240

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	10	5	10	0
CIVILIAN	607	65	219	388
TOTAL	617	70	229	388

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
48	381.778	89.394	203.880	675.052	14.247	11.417

## ...MISSION

MANAGE AMC R&D STRUC MAT & MECH PROG AS LEAD LAB FOR MAT, SOLID MECH & TESTING TECHNOLOGY. CDT TECHNOLOGICAL PROG IN MAT & MECH USED IN ARMY MATERIEL, EXEC PROG IN OWN FAC & BY ASSIGNMENT & FUND TRF TO OTHER AMC LABS & CONTRACTORS.

## ...CURRENT IMPORTANT PROGRAMS

R&D PROGRAMS FOR IMPROVED MATERIAL - ARMOR  
 R&D PROGRAMS FOR IMPROVED MATERIAL - ABM HARDENING  
 R&D PROGRAMS FOR IMPROVED MATERIAL - AIRCRAFT  
 R&D PROGRAMS FOR IMPROVED MATERIAL - MATERIALS-PROCESSING & EVALUATION  
 R&D PROGRAMS FOR IMPROVED MATERIAL - ARMAMENTS

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

MANAGE AMC R&D PROG IN MATERIALS & MECHANICS & CONDUCT TECH PROGS IN MATERIALS SYSTEMS & MECHANICS DIRECTED TO ARMY MATERIEL. MANAGE DOO PROG AS EXECUTIVE AGENT-ARMOR TECHNOLOGY. MANAGE & CONDUCT INTEGRATED & DIRECTED BASIC & APPLIED RES ON MATERIALS SUCH AS METALS, CERAMICS, ORGANIC & IN-ORGANIC POLYMERS & COMPOSITES. MANAGE & CONDUCT THEORETICAL & APPLIED STUDIES ON MECH OF MATLS & SYSTEMS. IDENTIFY & INVE BASIC FACTORS INVOLVED IN PROC & APPL OF NEW & IMPROVED MATLS. TECH MANAGE FIVE INFO ANAL CEN. ASST IN DESIGN & DEV OF PROTOTYPES. DEV METHODS FOR TEST & EVAL OF MATS & STRUCTURES. MANAGE ARMY PORTION DEFENSE STANDARDIZATION PROG. CONDUCT ENGINEERING STANDARDIZATION EFFORT. MANAGE AMC, MATERIALS TESTING PROG. CONDUCT PEMA MANUFACTURING METHODS & TECHNOLOGY PROGRAMS & ADVISE COMMAND & INDUSTRY ON PROCESSING TECHNIQUES.



# INSTALLATION MATERIEL SYSTEMS ANALYSIS AGENCY

ABERDEEN PROV GR, MD.

DIR. DR. JOSEPH SPERRAZZA ASSOC. DIR. WALLACE H. HARRIS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL ROT&E	14.044	11.262
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	1.525	1.785
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	15.569	13.047
TOTAL INHOUSE	8.455	8.250
TOTAL INHOUSE ROT&E	7.512	7.262
ANNUAL OPERATING COST	1.845	1.674

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	13	0	13	0	
CIVILIAN	314	7	238	76	
TOTAL	327	7	251	76	

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
4	3.700	36.500	3.000	48.200	1.773	0.360

## ...MISSION

TO PROVIDE THE CENTRAL TECHNICAL CAPABILITY OF AMC FOR THE CONDUCT OF MAJOR SYSTEMS ANALYSES OF PROPOSED AND EXISTING ARMY WEAPONS/MATERIEL SYSTEMS SERVES AS THE AMC FIELD AGENCY TO ADMINISTER THE JOINT TECHNICAL COORDINATING GROUP FOR MUNITIONS EFFECTIVENESS PROGRAM

## ...CURRENT IMPORTANT PROGRAMS

SYSTEMS ANALYSIS OF GROUND WEAPONS SYSTEMS  
SYSTEMS ANALYSIS OF AIR WARFARE SYSTEMS  
SYSTEMS ANALYSIS OF COMBAT SUPPORT SYSTEMS  
SYSTEMS ANALYSIS OF RELIABILITY AVAILABILITY AND MAINTAINABILITY  
COORDINATION OF JOINT MUNITIONS EFFECTIVENESS

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

CONDUCT AMC WPN SYS ANALYSIS AND EVAL OF MATERIAL CONCEPTS AND PROPOSALS DEVELOPS, IMPROVES, AND DISSEMINATES METHODOLOGY AND TECHNIQUES FOR- CONDUCT OF SYS ANALYSIS, ANAL OF PERFORMANCE, SCHEDULE AND COST RISKS, DESIGN, CONDUCT AND EVAL OF TESTS. EVAL LIFE CYCLE REQ OF MATERIAL SYS. CONDUCTS TACTICAL, OPERATIONAL ANALYSIS OF WPN & MATERIAL SYSTEMS. RELIABILITY, AVAILABILITY AND MAINTAINABILITY CENTER FOR ARMY SYS. TECH DIR OF AMC SURVEILLANCE PROGRAM FOR STOCKS OF ARMY MISSILES, NUCLEAR, AND NONNUCLEAR AMMUNITION. PROVIDE TECH COORD, DATA, AND ANALYSIS FOR DETERMINATION OF JOINT SERVICES MUNITIONS EFFECTIVENESS MODELS AND MANUALS.

# INSTALLATION MATERIEL TESTING DIRECTORATE

ABERDEEN PROV GR, MD.

C.O. COL WALTER R. HARRIS TECH. DIR. R.P. WITT

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	8.770	8.433
TOTAL PROCUREMENT	15.876	15.264
TOTAL O&M	0.915	0.887
TOTAL OTHER	0.953	0.861
TOTAL ANNUAL LAB	26.514	25.445
TOTAL INHOUSE	25.908	24.885
TOTAL INHOUSE RDT&E	8.604	8.273
ANNUAL OPERATING COST	14.881	14.234

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	99	0	61	38
CIVILIAN	979	1	171	808
TOTAL	1078	1	232	846

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
67750	1220.000	424.000	905.000	2549.000	227.000	82.000

## ...MISSION

PLAN CDT & REPT TESTS OF WPNS WPN SYS RKTS & GM SYS FIRE CON SURV & TGT  
ACQ EQUIP ITEMS OF AMMO & MUN COMPONENTS CBT VEHs OTHER AUTO MAT GEN  
EQUIP SUCH AS GENERATORS & AIR CONDS PROC INSP STORE & ISSUE ARMOR PLATE  
FOR ALL USAMC AMMO TESTING PROV R&D ADVICE TO PROPONENT AGCYS & DEVELOP-

## ...CURRENT IMPORTANT PROGRAMS

ENGR TEST FUZE MINE AT XM616  
FATIGUE CORRELATION TEST CANNON 105MM GUN M68  
ENGR DESIGN TEST TRUCKS CARGO/AMBULANCE 11/4T XM705/XM737  
PROD IMP TEST 105MM M392 APDS-T WITH REDUCING LINER  
FEAS OF MEAS GENERATOR PERFORMANCE CHARACTERISTICS WITH A COMPUTER

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

ERS DURING DEVELOPMENT STAGE  
TEST AREA 68700 ACRES RANGE TO LAND IMPACT 26000 M RANGE TO WATER IMPACT  
30000 M 41 M1 OF AUTMV CRS INCL 27 SP ENGR TEST CRS & OBSTACLES VARIETY  
OF ENVIR OR COND EQUIP SP CHAMBERS FOR SUBJECTING EQUIP TO DUST SALT  
SPRAY OR SOLAR RADN ISOLATED VIBRATION TEST FAC WHICH PERMITS SHAKING  
EXPLO EQUIP SIMULTANEOUSLY WITH TEMP CONDITIONING FAC FOR CONTROLLED  
TESTS OF ELEC CON & GUIDANCE EQUIP FREQ SOURCE WHICH PERMITS TESTING ALL  
TYPES OF MAT IN PRESENCE OF A HIGH INTENSITY ELEC MAGNETIC RADN SP FAC  
FOR TEST OF ARMOR PLATE SP VEL & TGT EQUIP IS AVAIL FOR OBSERVATIONS  
DURING RAPID FIRE AS IS A RKT TRACK FOR CONTROLLED TERMINAL BALLISTIC  
TESTS FAC AVAIL FOR TESTS OF SP ELECTRONIC & FIRE CON EQUIP & RELATED  
SYS & COMPONENTS

INSTALLATION MEDICAL BIOMECHANICAL RESEARCH LABORATORY WASHINGTON, D.C.

C.O. COL ORLYN C. OESTEREICH SCI. DIR. DR. FRED LEONARD

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972	1973
	(ACTUAL)	(ACT + EST)
TOTAL RDT&E	0.855	0.000
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.160	0.000
TOTAL ANNUAL LAB	1.025	0.000
TOTAL INHOUSE	1.025	0.000
TOTAL INHOUSE RDT&E	0.865	0.000
ANNUAL OPERATING COST	0.035	0.000

PERSONNEL	PERSONNEL DATA (END OF FY 1972)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	18	2	12		6
CIVILIAN	30	4	15		15
TOTAL	48	6	27		21

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
0	11.463	1.022	0.000	12.485	0.976	0.410

...MISSION

TO CONDUCT FUNDAMENTAL AND APPLIED RESEARCH TO DEVELOP MATERIALS AND DEVICES FOR INTERNAL AND EXTERNAL BIOMECHANICAL APPLICATION AND THE FABRICATION OF PROTOTYPE DEVICES OF SPECIALIZED MILITARY NATURE OF MILITARY INTEREST.

...CURRENT IMPORTANT PROGRAMS

INSTRUMENTATION TO DIFFERENTIATE BETWEEN VIABLE AND NECROTIC TISSUE. SYNTHESIS AND CHARACTERIZATION OF SURGICAL REPAIR MATERIALS AND HEMOSTATIC AGENTS. MINERALIZATION OF SKELETAL AND SOFT TISSUE AND MEANS OF ENHANCING THE RATE OF BONE HEALING. PROSTHETIC AND ORTHOTIC DEVICES FOR THE SEVERLY HANDICAPPED/TRAUMATIZED PATIENT.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

LAB HAS SUFFICIENT EQUIPMENT AND FACILITIES TO CARRY OUT AN ONGOING RESEARCH PROGRAM IN THE BIOENGINEERING FIELD. THIS INCLUDES INSTRUMENTATION FOR LIGHT SCATTERING, CHROMATOGRAPHY, ULTRACENTRIFUGATION RADIOASSAYS, OPTICAL METHODS, DTA, SYNTHESSES, STEAM STERILIZATION, OVENS, BATHS, HISTOLOGY AND ELECTRON MICROSCOPY. LAB HAS CAPABILITY TO PERFORM ISOTOPE, METABOLIC, AUTORADIOGRAPHY, CELL ORGANELLE, RADIOLOGY, X-RAY, AND CELL AND TISSUE CULTURE STUDIES. FACILITIES INCLUDE AN ANIMAL HOLDING FACILITY, EXPERIMENTAL SURGERY ROOM, AND A MACHINE SHOP EQUIPPED WITH WELDING AND METAL WORKING MACHINES.

# INSTALLATION MEDICAL EQUIPMENT R&D LAB

FT. TOTTEN, N.Y.

C.O. COL WILLIAM L. BOST TECH DIR AARON ISMACH

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	0.775	0.000
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.174	0.000
TOTAL ANNUAL LAB	0.949	0.000
TOTAL INHOUSE	0.949	0.000
TOTAL INHOUSE RDT&E	0.775	0.000
ANNUAL OPERATING COST	0.423	0.000

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	
MILITARY	15	0	1	14
CIVILIAN	34	0	3	31
TOTAL	49	0	4	45

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)				REAL	PROP
	LAB	ADMIN	OTHER			
0	21.523	9.081	6.469	37.073	0.444	0.444

## ...MISSION

CONDUCTS ENGINEERING RESEARCH AND DEVELOPMENT LEADING TO PRODUCTION OF FIELD MEDICAL EQUIPMENT FOR THE ARMY AND ON A REQUIRED BASIS FOR THE OTHER SERVICES.

## ...CURRENT IMPORTANT PROGRAMS

ARTHROPOD AND RODENT CONTROL EQUIPMENT.  
PULSED WATER PRESSURE DEVICE FOR ARM AND HAND WASHING.  
FIELD DENTAL EQUIPMENT.  
HYPODERMIC INJECTION APPARATUS, VETERINARY MEDICINE, FIELD.  
FIELD MEDICAL HUMAN BODY, DIAGNOSTIC, EXAMINATION, AND RECORDING SYSTEM.

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

ELECTRICAL/ELECTRONICS BRANCH IS EQUIPPED WITH HAND METERS, GENERATORS, OSCILLOSCOPES, REGULATED POWER SOURCES AND RECORDERS. PHYSICAL TESTING BRANCH IS EQUIPPED WITH AN INSTRON TESTING MACHINE AND ENVIRONMENTAL CHAMBERS. PROTOTYPE FABRICATION FACILITY IS EQUIPPED WITH LATHES, MILLING MACHINES, SURFACE GRINDERS, SHEARS, POWER BRAKE, POWER ROLLER, SPOT WELDERS, FOUNDRY, HELIARC AND GAS WELDING EQUIPMENT, HEATING, TREATING OVEN, PAINT OVEN, FABRIC SEWING MACHINE, PLASTIC FORMING EQUIPMENT, CARPENTRY AND PATTERN MODEL MAKING TOOLS.

# INSTALLATION MEDICAL RESEARCH AND NUTRITION LAB, FGH

DENVER, CO.

C.O. COL JOHN E. CANHAM

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	2.426	2.583
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	1.106	1.216
TOTAL ANNUAL LAB	3.532	3.799
TOTAL INHOUSE	3.532	3.799
TOTAL INHOUSE RDT&E	2.426	2.583
ANNUAL OPERATING COST	0.559	0.592

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	
MILITARY	119	30	69	50
CIVILIAN	99	12	45	54
TOTAL	218	42	114	104

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN		OTHER	REAL PROP
2	83.663	5.138	19.087	107.888	5.079	3.375

## ...MISSION

DETERMINE THE ADEQUACY OF TROOPS DIET IN ALL ENVIRONMENTS AND RECOMMEND NUTRITIONAL MEASURES FOR OPTIMUM PERFORMANCE. CONDUCT BASIC/APPLIED RESEARCH ON MEDICAL/SURGICAL AND NUTRITIONAL PROBLEMS, COMPUTER TECHNIQUES IN BIO-MEDICAL AREAS, FOOD HYGIENE, AND PHYSIOLOGY OF EXERCISE AND FAT.

## ...CURRENT IMPORTANT PROGRAMS

NUTRITIONAL AND METABOLIC ADAPTATION AND INTERRELATIONSHIPS.  
PERIPHERAL BLOOD FLOW STUDIES FOLLOWING SURGICAL INTERVENTION.  
BIOCHEMICAL FACTORS INFLUENCING PHYSIOLOGICAL FUNCTIONING.  
APPLIED NUTRITION STUDIES OF MILITARY POPULATIONS.  
NUTRITIONAL ASPECTS OF MILITARY PERSONNEL AND MILITARY DOG PERFORMANCE.

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

HUMAN METABOLIC WARD WITH TEMP AND HUMID CONTROL RM, GERM -FREE ANIMALS, ACOUSTIC PHYSIO PERF, ELECTRON MICROSCOPY, HIGH ALT LAB AT PIKES PEAK, ENVIRON TEST CHAMBER, RCA 301-355 ADPS, AUTO ANALYZERS AND RECORDERS INCLUDING AUTO BETA AND GAMMA COUNTERS, SHADOW SHIELD WHOLE BODY COUNTER, AND MASS SPECTROMETER. RSCH INCLUDES NUTR SURVEYS AND RATION TESTING, BIOMED CMPT RSCH, INFLUENCE OF HIGH TERRESTRIAL ALT ON PHYSIO-PSYCHO PERF, BODY COMPOSITION, METABOLISM AND MODIFYING FACTORS, BASIC/APPLIED STUDIES OF TRACE MINERAL METABOLISM, NUTRIENT RQR AND INTERRELATIONSHIP, METABOLIC RESPONSE OF MAN TO NUTR AND DISEASE, EXPER SURG, COMPARATIVE PATHOLOGY OF STRESS IN ENVIRON AND OF NUTR, PHYSIO AND BIOCHEM STUDIES OF MUSCLE METABOLISM, EXER AND FATIGUE IN MAN AND MILITARY DOG.

# INSTALLATION MEDICAL RESEARCH LABORATORY

FT. KNOX, KY.

C.O. COL FRANK R. CAMP

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	1.754	1.680
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.794	0.613
TOTAL OTHER	0.707	0.788
TOTAL ANNUAL LAB	3.255	3.081
TOTAL INHOUSE	3.255	3.081
TOTAL INHOUSE RDT&E	1.754	1.680
ANNUAL OPERATING COST	1.187	1.014

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	119	17	98	21
CIVILIAN	132	14	36	96
TOTAL	251	31	134	117

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL REAL PROP	EQUIP
20	88.025	5.368	34.734	128.127	0.280	3.072

...MISSION  
CONDUCT RESEARCH IN SENSORY PSYCHOPHYSIOLOGY. CONDUCT RESEARCH IN BIOLOGIC EFFECTS OF LASER RADIATION. CONDUCT RESEARCH IN MILITARY BLOOD BANKING. OPERATE BLOOD DONOR CENTER AND CONDUCT A TRAINING PROGRAM IN IMMUNOHEMATOLOGY.

...CURRENT IMPORTANT PROGRAMS  
MILITARY BLOOD BANKING METHODOLOGY AND EQUIPMENT. MILITARY BLOOD BANKING- EVALUATION OF CHANGES OF BLOOD DURING STORAGE. MILITARY PERFORMANCE- PSYCHOPHYSIOLOGY OF VISION. MILITARY PERFORMANCE- TRAUMATIC ORIGINS OF HEARING LOSS. LASER EFFECTS UPON VISUAL PERFORMANCE.

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
PROCESSES 500 UNITS OF WHOLE BLOOD AND COMPONENTS PER WEEK. PERFORMS AUTOMATED BLOOD GROUPING FOR NEW INDUCTEES. PROVIDES A LARGE SUPPLY OF FROZEN BLOOD AND COMPONENTS TO DOD HOSPITALS. PERFORMS CERTAIN SPECIALIZED TESTS THAT CAN NOT BE PERFORMED BY MEDDAC. ANECHOIC CHAMBER FOR SPECIALIZED AUDIO TESTS. HOLDING CAPABILITY FOR UP TO 100 PRIMATES. ELECTRON MICROSCOPY CAPABILITY. CONDUCT RESEARCH IN SENSORY PSYCHOPHYSIOLOGY AND BIOLOGIC EFFECTS OF LASER RADIATION. CONDUCT RESEARCH IN MILITARY BLOOD BANKING. CONDUCT TRAINING PROGRAM IN IMMUNOHEMATOLOGY. CONDUCT ENLISTED BLOOD BANKING COURSE 311-1.

# INSTALLATION MEDICAL RESEARCH UNIT

KUALA LUMPUR MAYLASIA

C.O. COL FRANCIS C. CADIGAN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972	1973
	(ACTUAL)	(ACT + EST)
TOTAL RDT&E	0.224	0.225
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.077	0.083
TOTAL ANNUAL LAB	0.301	0.308
 TOTAL INHOUSE	 0.301	 0.308
TOTAL INHOUSE RDT&E	0.224	0.225
ANNUAL OPERATING COST	0.000	0.000

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	
MILITARY	6	5	7	1
CIVILIAN	0	0	0	0
TOTAL	6	5	7	1

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
15	7.000	0.900	0.000	7.900	0.100	0.222

...MISSION  
TO FIND A DRUG OR NATURAL FACTOR WHICH BLOCKS ENDOTOXIC FEVER.  
TO STUDY INFECTIOUS DISEASES OF POTENTIAL MILITARY IMPORTANCE IN EQUATORIAL ASIA.

...CURRENT IMPORTANT PROGRAMS  
STUDY SCRUB TYPHUS TRANSMISSION IN VIRGIN FORESTS.  
EVALUATE SUBHUMAN PRIMATES FOR HUMAN MALARIA HOSTS.  
DETERMINE TRANSOVARIAL TRANSMISSION RATE OF RICKETTSIA.  
STUDY DIARRAHEA IN ABORIGINAL FOREST DWELLERS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
CONTINUED RESEARCH EFFORTS ALONG PRESENT LINES WITHIN THE SCOPE OF RESEARCH ACTIVITIES, TO PROVIDE DIAGNOSTIC LABORATORY CONSULTATION FOR MALAYSIAN CIVILIAN AND MILITARY MEDICAL SERVICES AND FOR COMMONWEALTH MILITARY MEDICAL SERVICES. LABORATORY SPACE AND ANIMAL-REARING FACILITIES ARE PROVIDED BY THE INSTITUTE FOR MEDICAL RESEARCH, KUALA LUMPUR, MALAYSIA.

# INSTALLATION MEDICAL RESEARCH UNIT

BALBOA HEIGHTS, C.Z.

C.O. LTC JAMES C. BURKE

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	0.191	0.193
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.126	0.123
TOTAL ANNUAL LAB	0.317	0.316
TOTAL INHOUSE	0.317	0.316
TOTAL INHOUSE RDT&E	0.191	0.193
ANNUAL OPERATING COST	0.090	0.090

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	9	2	5	4
CIVILIAN	8	0	0	8
TOTAL	17	2	5	12

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
0	5.000	0.600	0.000	5.600	0.000	0.061

...MISSION  
IN CONJUNCTION WITH OTHER U.S. GOVERNMENT AGENCIES, CONDUCTS RESEARCH ON MEDICAL AND ENVIRONMENTAL PROBLEMS OF MILITARY IMPORTANCE IN CENTRAL AMERICA, SOUTH AMERICA AND PANAMA.

...CURRENT IMPORTANT PROGRAMS  
PREVALENCE AND DISTRIBUTION OF PARASITIC DISEASE IN LATIN AMERICA.  
PATHOGENESIS OF PARASITIC INFECTIONS.  
BIONOMICS OF PHLEBOTOMUS FLIES.  
EPIDEMIOLOGY AND IMMUNOLOGY OF TROPICAL VIRUSES.

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
DIRECT AND INDIRECT ISOLATION AND IDENTIFICATION OF PARASITIC ORGANISMS AND THEIR VECTORS IN CENTRAL AND SOUTH AMERICA. LABORATORY SPACE ADEQUATE FOR THE SCIENTIFIC DISCIPLINES OF ENTOMOLOGY, PARASITOLOGY, PATHOLOGY AND VIROLOGY. SPECIAL EQUIPMENT AND FACILITIES TO SUPPORT THESE DISCIPLINES INCLUDE FLUORESCENT MICROSCOPE, AUTO-TECHNICIAN, CRYPTOTAT, PHOTOMICROGRAPHY, LABORATORY ANIMAL QUARTERS, TISSUE CULTURE LINES, LIQUID NITROGEN PLANT AND ACCESS TO DATA PROCESSING EQUIPMENT.



# INSTALLATION MISSILE RES., DEV. AND ENGINEERING LAB

REDSTONE ARSENAL, AL.

C.O. MG EDWIN I. DONLEY DIR. DR. JOHN L. MCDANIEL

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972	1973
	(ACTUAL)	(ACT + EST)
TOTAL RDT&E	73.792	67.719
TOTAL PROCUREMENT	4.577	4.217
TOTAL O&M	3.722	4.764
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	82.091	76.700
TOTAL INHOUSE	37.154	38.797
TOTAL INHOUSE RDT&E	29.964	30.516
ANNUAL OPERATING COST	13.774	14.600

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	31	3	34	3
CIVILIAN	1196	59	680	516
TOTAL	1227	62	714	519

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
11000	1168.000	262.000	408.000	1838.000	23.178	35.294

## ...MISSION

PLAN & DIRECT MATERIEL DEVELOPMENT PROGRAMS & PROJECTS NOT SELECTED FOR PROJECT OR COMMODITY MGMT. MANAGE BASIC & APPLIED RESEARCH PROJECTS. INITIATE & PERFORM RESEARCH & COMPONENT DEVELOPMENT TO GENERATE NEW TECHNOLOGY & PERFORM FEASIBILITY & DESIGN STUDIES FOR FUTURE WPN SYS.

## ...CURRENT IMPORTANT PROGRAMS

ADVANCED LASER DEVELOPMENT  
MISSILE TECHNOLOGY-SYSTEMS DEVELOPMENT  
HIGH ENERGY LASER RESEARCH  
HELIBOPNE, LASER, FIRE, FORGET & HELLFIRES  
TERMINAL HOMING SYSTEM

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

PERFORM LONG RANGE TECH PLANNING. DESIGN, DEV AND FABRICATE PROTOTYPE MS L SYS. TECH EVALUATE & SUPV R&D CONTR PROPOSALS & EFFORTS. PLAN & CONDUCT ENGR DESIGN TESTS. OPERATE ADV SIMULATION FACILITY, AIGHT CTR, ARMY ROCKET PROP & TECH & MGMT CTR. SERVE AS AMC LEAD LAB FOR G&C/ TERM HOMING & HI ENERGY LASERS. FACILITIES-- ADV SIMULATION FAC WITH A CENTRAL COMP CM PLX & 4 SIMULATORS & INFRARED SYS, ELECTROOPTICAL SYS, RF SYS, FLIGHT MOTIONG. PLASMA JET FAC, PLASMA DRIVEN SHROUD WIND TUNNEL, 2 MEV VAN DE GRAFF ACCELERATOR, LASER TEST RANGE, X-RAY DIFFRACTOMETER & SPECTROGRAPH, PROPELLANT EVAL FAC, HYBRID SIM FAC WITH RF ANECHOIC CHAMBER & TRANSMITTER SPECTRAL ANALYZER, RADIATION HOMING MSL TEST BED FAC, CLEAN ROOM COMPLEX, STATIC TEST FAC, FLIGHT & TRACK TEST FAC, ENVRMT TEST LAB, MCMORROW LABORATORIES WITH 356,400 SQ FT & COMPUTERS & EQUIP VALUED AT 17M.

# INSTALLATION MOBILITY EQUIPMENT R&D CENTER

FT. BELVOIR, VA.

C.O. COL BENNET L. LEWIS TECH. DIR. WILLIAM B. TAYLOR

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	44.745	42.714
TOTAL PROCUREMENT	36.489	31.754
TOTAL O&M	10.437	9.578
TOTAL OTHER	0.299	0.300
TOTAL ANNUAL LAB	91.970	84.346
TOTAL INHOUSE	27.406	31.215
TOTAL INHOUSE RDT&E	18.855	23.168
ANNUAL OPERATING COST	6.789	6.650

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	54	4	34	20
CIVILIAN	1370	23	596	774
TOTAL	1424	27	630	794

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL REAL PROP EQUIP		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
1060	611.710	147.480	158.648	917.838	50.215	27.018

## ...MISSION

BASIC AND APP RSCH DES DEV AND ENGRG TEST ON ASGND EQUIP&RAIL-MARINE& AMPHIB BDG&ASLT STREAM CROSS&ELEC PWR&INDUS ENGS&CONSTR EQUIP&FIREFIGHTG HTG-AC&WASTE DISPOSAL&WATER PURIF&COUNTERMINE&BARRIER&CAMOUFLAGE&FUELS HDLG&MHE&DEMLS&PHYS SECURITY&ENGR SPT TO MSC QUAN PROC AND MAINT ACTIVIT

## ...CURRENT IMPORTANT PROGRAMS

EARTHMOVING FAMILY OF ENGR CONSTRUCTION EQUIPMENT &FAMECE& ELEC PWR GEN INCL LIQ FUEL CELLS RANKING CYC PLANTS TURBOALTERNATORS MINE NEUTRALIZATION MINE DETECTION COUNTERMINE SYSTEMS LIGHTWEIGHT FLOATING BRIDGE &RIBBON BRIDGE& CAMOUFLAGE TECHNIQUES AND MATERIEL

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

OFFICES AND LABORATORIES WITH SUPPORTING DATA PROCESSING&ENGINEERING AND INSTRUMENTATION SERVICES&SHOPS, TEST COURSES AND TEST LANES. EQUIPMENT AND CAPABILITIES INCLUDE SEMI AUTOMATED FUEL CELL AND ELECTRIC POWER PLANT TEST LAB&AIRCONDITIONING AND HTG LAB&ANECHOIC MICROWAVE FACILITY&ANECHOIC CHAMBER FOR ACOUSTIC HOMING STUDIES&ENERGY CONVERSION RESEARCH FACILITY&HIGH PRESSURE AIR COMPRESSORS&HYDRAULICALLY ACTUATED TEST FRAME FOR BRIDGES&SHOCK TEST TUBE SIMULATING HIGH EXPLOSIVE BLAST EFFECTS&POWER SYSTEMS SIMULATOR&OUTDOOR RAIN TEST SITE&FULL SCALE RAILCAR HUMP TEST FACILITY&LARGE AND SMALL TROPICAL TEMPERATURE AND HUMIDITY TEST CHAMBERS POL TEST AREA& MINE DETECTION TEST LANES&WATER TREATMENT RESEARCH LAB& AND A MATERIALS RESEARCH LABORATORY.

# INSTALLATION NATICK LABORATORIES

NATICK, MASS.

C.O. BG JOHN G. MCWHORTER TECH. DIR. DALE H. SIELING

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	23.207	21.938
TOTAL PROCUREMENT	6.435	0.801
TOTAL O&M	9.019	8.964
TOTAL OTHER	1.620	1.725
TOTAL ANNUAL LAB	40.281	33.368
TOTAL INHOUSE	25.684	26.995
TOTAL INHOUSE RDT&E	14.968	16.663
ANNUAL OPERATING COST	5.412	5.379

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	
MILITARY	132	11	62	70
CIVILIAN	1236	90	479	757
TOTAL	1368	101	541	827

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL REAL PROP	EQUIP
3087	525.000	65.900	274.600	865.500	40.152

## ...MISSION

ACCOM ASG R-D IN THE PHYS AND BIOL SCI AND ENG TO MEET MIL RQR IN THE COMMODITY AREAS OF TEX CLO BODY ARMOR ORG MATLS INSECT AND FUNG SUBS CNTRS FOOD SVC EQUIP FLD SPT, EQUIP TENT AND EQUIP AND AIR DEL EQUIP. IN DESIG CMDTY AREAS PROV TECH AND ENG SPT IN CONNEC W/ACCOM OF AE AND STD.

## ...CURRENT IMPORTANT PROGRAMS

POLLUTION ABATEMENT STUDIES  
ANAL MIL FOOD SVC SYS TO EST MODERN METH OF DETERMINING DAILY FOOD ALLOW  
PERSONNEL ARMOR PROGRAM  
FLEXIBLE PACKAGING SYSTEM FOR HEAT PROCESSED FOODS  
WHOLESOMENESS OF RADAPPERTIZED BEEF

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

COBALT 60 IRRAD FACILITY DESIGNED FOR MAX FLEXIBILITY IN FOOD PROCESSING  
BACTERIOLOGY LAB EQUIP FOR INVESTIGATIONS OF PATHOGENIC MICROORGANISMS  
FLAME PROTECTION LAB AND FACILITY INCLUDING AN OUTDOOR FLAME PIT  
HIGH RESOLUTION MASS SPECTROMETER FOR ANALYSIS OF VOLATILE COMPOUNDS  
FOOD PROCESSING FAC FOR CONTROLLED PREPROCESSING AND PROC BY SEV TECHNIQ  
LAB SUBSONIC WIND TUNNEL CAPABLE OF VELOCITIES UP TO 110 FEET PER SEC  
HEAT TRANSFER LAB TO STUDY HEAT AND MASS TRANSPORT CHAR OF FABRICS  
ELECTRON LINEAR ACCELERATOR DESIGNED FOR HIGH POWER OUTPUT IN FOOD PROV  
DROP TEST FAC CONS OF 40 TON CAPACITY TRACKED CRANE AND A 50 FT BOOM  
DYEING AND FINISHING LAB FOR CONDUCTING STUDIES OF TEXTILES  
FEBETRON MACHINE USED AS A RADIA SOURCE FOR PULSE RADIOLYSIS STUDIES  
RAIN ROOM DESIGNED TO DUPLICATE RAINFALL CORRESPONDING TO NATURAL RAIN

# INSTALLATION NIGHT VISION LABORATORY

FT. BELVOIR, VA.

DIR. BENJAMIN GOLDBERG DEP. DIR. DONALD J. LOOFT

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	32.654	27.161
TOTAL PROCUREMENT	0.000	2.615
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	32.654	29.776
TOTAL INHOUSE	15.727	12.294
TOTAL INHOUSE RDT&E	15.727	12.294
ANNUAL OPERATING COST	6.814	7.200

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	51	0	35	16
CIVILIAN	409	34	219	190
TOTAL	460	34	254	206

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL REAL PROP	EQUIP
15	73.625	29.883	67.131	170.639	43.961	45.000

## ...MISSION

NVL IS RESPONSIBLE FOR PROVIDING THE ARMY WITH A NIGHT-VISION CAPABILITY EQUAL TO THAT OF DAYLIGHT. AS SUCH, NVL HAS BEEN DESIGNATED BY USAMC AS LEAD LABORATORY TO PROVIDE CENTRALIZED TECHNICAL DIRECTION IN THE MANAGEMENT OF THE USAMC NIGHT VISION TECHNOLOGICAL BASE.

## ...CURRENT IMPORTANT PROGRAMS

LOW LEVEL NIGHT OPERATIONS  
 FAR INFRARED TECHNOLOGY  
 TURRET INTEGRATED NIGHT THERMAL SIGHT  
 THERMAL VIEWER FOR UNIVERSAL APPLICATIONS  
 COMMON TOW/Dragon NIGHT SIGHT

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

NVL IS RESPONSIBLE FOR PROVIDING A NIGHT CAPABILITY TO THE ARMY. IN KEEPING WITH THIS MISSION OBJECTIVE, THE NIGHT VISION PROGRAM IS BEING CARRIED OUT IN FOUR MAJOR SYSTEM APPLICATION AREAS. GROUND-DEVICES FOR INDIVIDUAL SOLDIERS AND PATROLS/GROUND VEHICLES-WHEELED AND TRACKED VEHICLES/AIRBORNE-FOR OBSERVER, GUNNER AND PILOT/AND MISSILE SYSTEMS. THE SYSTEMS DEV PROGRAM BOTH FOR THE SHORT RANGE AND LONG RANGE GOALS IS DEPENDENT ON AN ACTIVE AND INNOVATIVE NV TECHNOLOGY BASE CONSISTING OF THE FOLLOWING DISCIPLINES-IMAGE INTENSIFICATION, FAR INFRARED, RADIATION SOURCES AND VISIONS. THE DOMINANT EFFORT AT THIS TIME IS IN FAR-INFRARED TECHNOLOGY WHICH OFFERS GREAT POTENTIAL FOR HIGH PERFORMANCE SYSTEMS BUT WHICH ARE COMPLEX AND COSTLY. THEREFORE, THE PRIME TECHNOLOGICAL EFFORT IS TO REDUCE COST AND COMPLEXITY.

INSTALLATION PICATINNY ARSENAL LABORATORIES

DOVER, N.J.

C.O. COL G.M. MONTGOMERY TECH. DIR. H.W. PAINTER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	99.200	83.800
TOTAL PROCUREMENT	22.400	19.300
TOTAL O&M	8.300	9.300
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	129.900	112.400
TOTAL INHOUSE	86.000	70.200
TOTAL INHOUSE RDT&E	55.300	41.600
ANNUAL OPERATING COST	5.900	6.200

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	68	1	51	17
CIVILIAN	2676	62	1889	787
TOTAL	2744	63	1940	804

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP EQUIP
6495	594.642	668.245	2580.998	3843.885	72.600 45.000

...MISSION

CEN FOR LIFE CYCLE FUNC FR BASIC AND APPLIED RSCH THRU DEVMT AND ENGRG OF NUC AND CONV MUNS SUCH AS MINES, GRENS, RKT AND MSLE WHDS, PROJS, FUZES, EXPLOS, PYRO, PROP, MATS, PHYS AND ENGRG SCIENCE, DIGITAL ANALOG COMPTG. PROCS ALL NUC AND ASG CONV MUNS. OPS OOD PLASTEC.

...CURRENT IMPORTANT PROGRAMS

PROJECTILE 8 INCH XM673 ENG DEV  
PROJECTILE 8 INCH XM711 ADVANCED DEV  
FLUIDIC OPATION KIT ADVANCED DEV  
TANK CANNON AMMUNITION EXPLORATORY DEV  
PIROTECHNIC EXPLORATORY DEV

...FUNCTIONS/EQUIPMENT/CAPABILITIES

NUC WPNS PROTOTYPE FAB AND ASSY, AND EXPLOS AND PROP PLT PLANTS PROV COMPL INTRGED FAC FOR ASSY, INSP AND TEST OF AK AND CONV MUNS AND COMPS AND THE MFG AND PROCING OF X EXPLOS AND PROP COMP. THE EXPLOS, PYRO, PROP, MATLS AND QA LABS HAVE UNUSUAL EQUIP FOR RSCH, RELIABILITY AND QA SUCH AS BETATRON, DYNAMITRON, HIGH SPEED PHOTO AND SHOCK LOAD FAC, HIGH ALT TEST CHAMBERS, ELECTROMAGNETIC RADIATION INST ETC. THE DEVMT AND ENVIRONMENTAL TEST AND EVAL FAC HAVE MAJOR CPBLTY AS STATIC AND DYNAMIC TEST RGS, DROP TOWERS, DUD RECOVY AND DISASSEMBLY, RF VULNERABILITY COMPL ENVIRONMENTAL SIM, TARGET EFF ETC. OTHER EQUIP INCL VIBRATORS FOR LOADS TO 2000 LB, STATIC RKT TEST RG, 2540 TON HYDROSTATIC PRESS, CMPT TAPE CON MFG EQUIP, VARIETY OF FUZE EVAL EQUIP, CLOSED CIRCUIT TV, HIGH ACCEL SLED TRACK.

# INSTALLATION R&D TECHNICAL SUPPORT ACTIVITY

FT. MONMOUTH, N.J.

DIR. EDWARD J. FISTER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972	1973
	(ACTUAL)	(ACT + EST)
TOTAL RDT&E	11.319	11.950
TOTAL PROCUREMENT	0.100	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	11.419	11.950
TOTAL INHOUSE	11.290	11.950
TOTAL INHOUSE RDT&E	11.290	11.950
ANNUAL OPERATING COST	3.903	3.692

PERSONNEL	PERSONNEL DATA (END OF FY 1972)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	12	0	2		10
CIVILIAN	654	0	101		553
TOTAL	666	0	103		563

ACRES	SPACE AND PROPERTY				COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP	
136	53.470	0.009	0.315	53.794	8.401	6.578	

...MISSION  
COMPOSITE MATERIALS  
ANTENNA MASTS AND MECHANICAL STRUCTURES  
VEHICULAR AND MARINECRAFT INSTALLATIONS  
COMPUTER AIDED DESIGN TECHNIQUES

...CURRENT IMPORTANT PROGRAMS  
MECHANICAL ENGINEERING - AIRBORNE EQUIPMENT  
MECHANICAL ENGINEERING - GROUND EQUIPMENT  
CRYOGENICS  
ENVIRONMENTAL EQUIPMENT AND SHELTER INSTALLATIONS  
COMPUTER AIDED DESIGN ENGINEERING AND MANUFACTURING

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
ELECTROMAGNETIC CAPABILITY FOR RFI  
ENVIRONMENTAL CONTROL-PHYSICAL AND MECHANICAL  
AIRCRAFT VIBRATION MEASUREMENTS  
COMPUTER AIDED DESIGN FABRICATION  
MODEL SHOP FABRICATION-ALL CRAFTS  
TEST AND MEASURING EQUIPMENT CALIBRATION AND REPAIRS  
MATHEMATICAL COMPUTATIONS AND STATISTICS

# INSTALLATION RESEARCH INSTITUTE OF ENVIRONMENTAL MEDICINE NATICK, MASS.

C.O. COL. LEEROY G. JONES TECH. DIR. DR. DAVID E. BASS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972	1973
	(ACTUAL)	(ACT + EST)
TOTAL RDT&E	2.600	2.772
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.751	0.904
TOTAL ANNUAL LAB	3.351	3.676
TOTAL INHOUSE	3.351	3.676
TOTAL INHOUSE RDT&E	2.600	2.772
ANNUAL OPERATING COST	1.032	1.070

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			TOTAL PROF	NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL		
MILITARY	71	18	55		16
CIVILIAN	102	20	45		53
TOTAL	173	38	104		69

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN		OTHER	REAL PROP
0	60.421	18.563	28.647	107.631	6.902	2.044

## ...MISSION

TO CONDUCT BASIC AND APPLIED RESEARCH TO DETERMINE HOW HEAT, COLD, HIGH TERRESTRIAL ELEVATION AND WORK AFFECT THE SOLDIERS LIFE PROCESSES, PERFORMANCE AND HEALTH. ADVISE THE ARMY AND THE SCIENTIFIC COMMUNITY.

## ...CURRENT IMPORTANT PROGRAMS

PREVENTION AND TREATMENT OF DISABILITIES DUE TO MILITARY OPERATIONS IN HEAT, COLD, AND AT ALTITUDE. PREDICTION OF LIMITS OF MILITARY PERFORMANCE AS A FUNCTION OF ENVIRONMENT, CLOTHING AND EQUIPMENT. MEDICAL PROBLEMS IN MILITARY ARCTIC OPERATIONS. BIOLOGICAL PROCESSES THAT LIMIT HEAVY PHYSICAL WORK.

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

CONDUCT RESEARCH AND PROVIDE GUIDANCE TO DESIGNERS, ENGINEERS, TACTICIANS, PLANNERS AND PHYSICIANS ON MILITARY PERFORMANCE AND CASUALTY PREVENTION AND TREATMENT IN EXTREME CLIMATES AND ENGINEERED ENVIRONMENTS. ADVISE ON HEALTH AND SAFETY IN MANEUVERS DURING HEAT, COLD OR HYPOXIC STRESS. TREAT COLD CASUALTIES AT BASSETT ARMY HOSPITAL, ALASKA. IN HUMAN AND ANIMAL RESEARCH, USE APPROXIMATELY 50 VOLUNTEER TEST SUBJECTS AND EXTENSIVE CLIMATIC CHAMBERS OF NLARS PLUS MANY SMALLER CHAMBERS, EXTENSIVE ANIMAL CARE FACILITIES, ELECTRON MICROSCOPE, UNDERWATER RESEARCH POOL, COPPER MANIKINS, AND DIVERSE EQUIPMENT FOR BIOCHEMICAL, BIOPHYSICAL, MEDICAL, PHYSIOLOGICAL, PHARMACOLOGICAL, AND PSYCHOLOGICAL MEASUREMENT.

INSTALLATION RESEARCH INSTITUTE OF INFECTIOUS DISEASES FT. DETRICK, MD.

C.O. COL DAN CROZIER TECH. DIR. DR. WILLIAM R. BEISEL

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	3.040	6.105
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	2.071	2.796
TOTAL ANNUAL LAB	5.111	8.901
TOTAL INHOUSE	5.111	8.901
TOTAL INHOUSE RDT&E	3.040	6.105
ANNUAL OPERATING COST	1.509	2.400

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	365	46	49	316
CIVILIAN	248	19	38	210
TOTAL	613	65	87	526

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
57	93.217	13.819	198.731	305.767	17.818	3.100

...MISSION

STUDIES PATHOGENESIS, DIAGNOSIS, PROPHYLAXIS, TREATMENT, EPIDEMIOLOGY OF INFECTIOUS DISEASES, EMPHASIZING PROBLEMS OF MEDICAL DEFENSE AGAINST BW, NATURALLY OCCURRING INFECTIONS OF PECULIAR MILITARY IMPORTANCE AND MICRO-ORGANISMS WHICH REQUIRE SPECIAL CONTAINMENT FACILITIES.

...CURRENT IMPORTANT PROGRAMS

THE CREATION OF AN AEROBIOLOGY DIVISION ALLOWS FOR NEW STUDIES OF PATHOGENESIS OF AIRBORNE INFECTIOUS DISEASES. DEVELOPMENT OF RAPID AND ACCURATE DIAGNOSTIC METHODS BEFORE APPEARANCE OF CLASSICAL SYMPTOMS OF DISEASE. DEVELOPMENT OF NEW VACCINES AND TOXOIDS. DEVELOPMENT OF METHODS FOR INFECTIOUS DISEASE MANAGEMENT.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

A UNIQUE COMPLEX OF RESEARCH LABORATORIES IS NOW FUNCTIONAL. THE 17 LABORATORY SUITES ARE USED FOR THE STUDY OF MICRO-ORGANISMS, INCLUDING HIGHLY INFECTIOUS ONES WHICH REQUIRE SPECIAL CONTAINMENT. THESE LABORATORIES PERMIT MULTIDISCIPLINE-ORIENTED RESEARCH INCLUDING IMMUNOLOGY, PATHOLOGY, PHYSIOLOGY, BIOCHEMISTRY, BIOPHYSICS, MOLECULAR BIOLOGY, AND TISSUE CULTURE. THE BUILDING HAS CAPABILITIES FOR STUDY OF LARGE ANIMALS, PRIMATES AND CUSTOMARY LABORATORY ANIMALS AS WELL AS HOSPITAL FACILITIES FOR MEDICAL PATIENTS AND FOR RESEARCH STUDIES UTILIZING VOLUNTEERS. AEROBIOLOGY DIV HAS FACILITIES FOR EXTENSIVE AEROSOL INVESTIGATIONS INCLUDING 2 LARGE ENVIRONMENTALLY-CONTROLLED CHAMBERS, 6 LABORATORY SITES, AND FACILITIES FOR INFECTED ANIMALS. USAMRIID RESEARCH IS SUPPORTED BY 2 COMPUTERS.



# INSTALLATION ROCK ISLAND ARSENAL LABORATORIES

ROCK ISLAND, IL.

C.O. MG H.A. RASMUSSEN CHIEF SCIENTIST DR. C.M. HUDSON

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	14.717	21.111
TOTAL PROCUREMENT	2.100	2.807
TOTAL O&M	4.458	3.008
TOTAL OTHER	0.085	0.084
TOTAL ANNUAL LAB	21.360	27.010
TOTAL INHOUSE	13.666	14.173
TOTAL INHOUSE RDT&E	9.227	11.192
ANNUAL OPERATING COST	6.321	7.089

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	9	1	11	2
CIVILIAN	749	19	304	445
TOTAL	758	20	315	447

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
180	103.617	100.838	106.679	311.134	3.598	11.189

## ...MISSION

SOFT WPN SYS, ARTY & INF WPNS, CREW SERVED WPNS MTD ON ANY TYP VEH, & INF  
CONVL ARTY LANH DVC FOR BOTH CONVL SHL & H CAP BST RKT ARTY SHL, EXCL  
FREE RKT, GM, BAL MSL, TGT MSL & RELATED LANH & GSE. CLIPS LK & MAG FLR FOR  
CONVL AMMO, TK, SP ARTY & ASGD SPV, CIPOLA, RCL & MT, ELEV & TRAV MECH.

## ...CURRENT IMPORTANT PROGRAMS

GUN LOW ALTITUDE AIR DEFENSE PROTOTYPE -GLAADS  
LARGE CALIBER SOFT RECOIL SYSTEM  
SQUAD AUTOMATIC WEAPON  
GUN AIR DEFENSE EFFECTIVENESS STUDY  
BEAM RIDER PROJECTILES FOR DIRECT FIRE SYSTEMS

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

FAC CAPABILITIES-RNG FAC PERMIT FIRING ARTY XPN OF 105MM SIZE OR SMALLER  
USING INRT PJCTL AT 0 DEGREES EL INTO PRF BUTT AT 100 YDS DIST. WPN FIR  
AT EL USING DISINTEGRATING PJCTL LOADED W/WET SAND. RNG BLDG HSG INDOOR  
RNG. 2 ARE 100 MIR. 1 CLIMATIC CHMBR RNG 1000 IN W/CONT HMD TEMP OF -90/  
PLUS 200 DEGREE F. 1 1000 IN XPN MT SIM RNG. ANY SA WPN THRU 40MM CAN  
BE FIRED. LATTER RNG 25 W, 20 H PERMITS FIRING FROM TK OR HLCPTR. ACCESS TO  
IBM 360/65 COMPUTATION CENTER. PROTOTYPE SHOP IN SUPPORT OF RTE.  
MAJOR EQUIP- ILLUSTRMAT 1200. CMPTR GRPHS. MT INSTM SYS. VAR FLEXIBILITY  
GUN MT. PROTOTYPE HIGH-SPEED SCNG IR RADIOMETER SYS. HOLOGRAPHIC SYS.  
VAR ANGLE HLCPTR MT. ALPHA LUBT TESTER MODEL LFW3. MOTION TABLE FOR SMALL  
TURRET STBLN TESTING. HYDR FLOW SIM-HYFLOS. SMALL TURRET FIRING FIXTURE.  
NON-FIRING AUTO AMMO LOADER FOR TANKS. THERM ENVIR SIM EQUIP FOR WPN SYS

# INSTALLATION RSCH INST FOR BEHAVIORAL AND SOCIAL SCIENCES WASHINGTON, D.C.

C.O. COL RICHARD A. ROTH TECH. DIR. DR. J.E. UHLANER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972	1973
	(ACTUAL)	(ACT + EST)
TOTAL RDT&E	8.706	6.580
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	8.706	6.580
TOTAL INHOUSE	2.540	3.315
TOTAL INHOUSE RDT&E	2.540	3.315
ANNUAL OPERATING COST	0.392	0.909

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	11	1	9	2
CIVILIAN	130	44	93	37
TOTAL	141	45	102	39

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
0	25.435	9.742	1.823	37.000	0.000	1.999

## ...MISSION

RSCH AND DEV PRGMS IN BEH AND SOC SCI FOR DEPT ARMY IN IND TNG AND PERF AND IN ORG SYS. PRGMS INCL RSCH: TO IMPRV TRNG AND TO INCR CAP OF SOL TO RSLVE PERS-INTRPERS PROBS, TO IMPRV DISTR MNPWR, ENHANCE EFF OF GRPS IN CMD-CNTRL, IMPRV PERF OF GRPS IN MIL SYS THRU ORG DEV, IMRRV UNIT LDRSHP

## ...CURRENT IMPORTANT PROGRAMS

EVALUATE EFFECTS OF COUNSELING AND PREDICTOR TESTS ON DISCIPLINE RATES  
NEW TECH TO EVAL OFCR LDRSHP POTENTIAL FOR KEY PERS MGT DECISNS IN OPMS  
HUMAN PERFORMANCE EXPERIMENTATION IN TACTICAL NIGHT OPERATIONS  
DETERMINE INFORMATION REQUIREMENTS FOR TACTICAL SITUATION MAP DISPLAYS  
ASSESSMENT OF ARMY RACE RELATIONS PROGRAMS

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

LABORATORY FACILITIES SUPPORT SIX TECH AREAS: 1. SYS INTEG AND CMD-CNTRL  
2. TEAM PERF ENHANCEMENT  
3. UNIT TRNG AND EDUC TECHNLGY  
4. IND TNG AND MNPWR DEV  
5. LDRSHP PERF  
6. SOC PROC. CENTRAL COMPUTER PROVIDES DATA PROCESSING & REAL TIME INTERFACING WITH VARIETY OF EXP STATIONS SUPPORTING ALL TECH AREAS  
TWO FIELD UNITS PROVIDE HUM PERF EXP SUPPORT TO MASTER PROG AND TO TACT NT VISION PROG. RSCH UTIL TEAM ASSESSES OPERATIONAL UTILIZATION OF RSCH PRODUCTS AND PROVIDES GUIDANCE FOR NEW RSCH DIRECTION

# INSTALLATION TANK-AUTOMOTIVE COMMAND LABS

WARREN, MI.

C.O. MG J.E. PIEKLIK DIR. RD&E COL L.F. FELDER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	46.291	46.639
TOTAL PROCUREMENT	26.604	41.667
TOTAL O&M	5.026	5.945
TOTAL OTHER	0.207	0.204
TOTAL ANNUAL LAB	78.128	94.455
TOTAL INHOUSE	27.551	27.016
TOTAL INHOUSE RDT&E	16.659	15.439
ANNUAL OPERATING COST	6.544	7.553

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	
MILITARY	16	0	19	3
CIVILIAN	989	6	412	577
TOTAL	1005	6	431	580

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL REAL PROP	EQUIP
1125	361.202	0.000	0.000	361.202	15.838	16.767

...MISSION  
RESPONSIBLE FOR RESEARCH, CONCEPT, DESIGN, DEVELOPMENT, FABRICATION, ADVANCED PRODUCTION ENGINEERING, SUPPORT TO PRODUCTION, FOR PRESENT AND FUTURE VEHICLES SYSTEMS AND SUB-SYSTEMS OF TANK-AUTOMOTIVE MATERIEL AND ITS FUTURE SCIENCES

...CURRENT IMPORTANT PROGRAMS  
AUTOMATIC TEST EQPT FOR INTERNAL COMBUSTION ENGINE POWERED MATERIAL  
MID-RANGE AND LONG RANGE CONCEPT STUDIES ON FUTURE TRANSPORT VEHICLES  
MID-RANGE AND LONG RANGE CONCEPT STUDIES ON FUTURE TACTICAL VEHICLES  
HYBRID ENGINE DEVELOPMENT  
RIVERINE RESEARCH

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
VEHICLE BRAKE DYNAMOMETER  
VEHICLE SUBSYSTEM INTEGRATION  
ANALYTICAL PREDICTION OF MILITARY VEHICLE PERFORMANCE  
VEHICLE MOTION SIMULATOR  
RIVER SIMULATOR FACILITY AND LAND LOCOMOTION SOIL BINS  
POLLUTION ABATEMENT  
VEHICLE SIGNATURE PROGRAM  
VEHICULAR NOISE REDUCTION PROGRAM  
SIX DEGREE OF FREEDOM SIMULATOR  
METAL ANAL WITH MICROPROBE ELECTRON MICROSCOPE ANALYZER AND TECHNIQUES  
DEVELOPMENT OF IMPROVED ARMOR WELDING AND FABRICATION  
LOW TEMPERATURE, SHOCK AND VIBRATION TEST FACILITIES

# INSTALLATION TROPIC TEST CENTER

FT. CLAYTON, C.Z.

C.O. COL HYRUM DALLINGA TECH. ADV. FRANK S. MENDEZ

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	2.792	2.587
TOTAL PROCUREMENT	0.063	0.040
TOTAL O&M	0.002	0.005
TOTAL OTHER	1.400	1.200
TOTAL ANNUAL LAB	4.257	3.832
TOTAL INHOUSE	4.257	3.832
TOTAL INHOUSE RDT&E	2.792	2.587
ANNUAL OPERATING COST	0.612	0.514

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	126	0	31	95
CIVILIAN	89	4	20	69
TOTAL	215	4	51	164

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
18868	66.363	87.971	67.118	221.452	1.211	3.908

## ...MISSION

PLAN AND CONDUCT ENVIRONMENTAL PHASES OF ENGINEERING, EXPANDED SERVICE, INTEGRATED ENGR/SERVICE EVALUATION, CHECK, AND CONFIRMATION TESTS. SUPPORT TROPICAL ENVIRONMENTAL TESTS CONDUCTED BY OTHER AGENCIES. CONDUCT RESEARCH IN TROPICAL ENVIRONMENTS.

## ...CURRENT IMPORTANT PROGRAMS

IN-HOUSE LABORATORY INDEPENDENT RESEARCH EILRN. DETERMINATION OF OPTIMUM TROPICAL STORAGE & EXPOSURE SITES, PHASE 1 AND PHASE 2. OPTIMUM DURATION OF TROPIC MATERIEL ITEMS. MOBILITY IN NATURAL ENVIRONMENT. EXPOSURE/PERFORMANCE TESTS OF SELECTED MATERIEL ITEMS.

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

EVALUATE AND RECOMMEND AS TO TEST ITEM SUITABILITY FOR PRESCRIBED USE RECOMMEND TO HQ,TECOM, RESEARCH PROJECTS IN SUPPORT OF ARMY RDT&E. PLAN AND SUPPORT RDT&E ACTIVITIES FOR DOD OR OTHER GOVERNMENT AGENCIES. NATURAL TROPICAL ENVIRONMENT. FIRING RANGES UP TO 15MM CALIBER. NATURAL TERRAIN MOBILITY COURSES. AMMO TEST STORAGE AND FUNCTIONING AREAS. CHEMICAL, BIOLOGICAL, ELECTRONICS, SOILS, HUMAN FACTORS, AND CALIBRATION LABORATORIES. JUNGLE GRASS AND COASTAL MATERIAL EXPOSURE SITES. JUNGLE RADIO RANGING SITES. MAN-PACK PORTABILITY COURSE. CALIBRATED SEISMIC DETECTION TEST GRIDS. PHOTOGRAPHIC SUPPORT FACILITY. TECHNICAL OPERATIONS SUPPORT FACILITY, POL TANK FARM.

INSTALLATION WALTER REED ARMY INSTITUTE OF RESEARCH

WASHINGTON, D.C.

C.O. COL E. L. BUESCHER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	13.691	15.645
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	1.974	1.786
TOTAL OTHER	4.291	5.068
TOTAL ANNUAL LAB	19.956	22.499
TOTAL INHOUSE	19.956	22.499
TOTAL INHOUSE RDT&E	13.691	15.645
ANNUAL OPERATING COST	3.120	3.120

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	546	168	305	241
CIVILIAN	606	120	253	353
TOTAL	1152	288	558	594

ACRES	SPACE AND PROPERTY				COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
1173	389.300	58.600	0.000	447.900	0.000	12.917	

...MISSION  
PERF MED R AND D AND CONDUCTS GRAD EDUC IN MED FLD, VET MED AND ALLIED MED SCI. SERVES AS CONSULTING AND DIAGNOSTIC REF LAB FOR ARMY. PROV ADVISORY SVC ON PROB OF EPIDEMIOLOGY IN MIL MED. PRODUCES AND DISTR BIOL PROD NOT AVAIL FROM COM SOURCES.

...CURRENT IMPORTANT PROGRAMS  
TO DISCOVER EFFECTIVE PREVENTIVE AND TREATMENT AGENTS FOR CONTROL OF DRUG REFRACTORY MALARIA. TO DEVELOP MODES FOR CONTROL OF MENINGOCOCCAL AND OTHER RESPIRATORY DISEASES OF RECRUITS. TO DEFINE THE ETIOLOGY OF DRUG ABUSE IN SOLDIERS. MOLECULAR PHARMACOLOGY OF CHEMOTHERAPEUTIC DRUGS. TO DEVELOP IMPROVED SURGICAL MGT OF SEVERELY INJURED CBT CAS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
RESEARCH, TEACHING AND REF LAB SERVICES SUMMARIZE MAJOR FUNCTIONS IN THE AREAS OF PREVENTIVE MEDICINE, INFECTIOUS DISEASES, SURGERY, NEUROPSYCHI-ATRIC DISEASES, INTERNAL MEDICINE, MEDICAL CHEMISTRY, AND BASIC MEDICAL SCIENCES. HIGHLY SOPHISTICATED MEDICAL EQUIPMENT IN ALL AREAS OF INVE-STITIGATION INCLUDING ELECTRON MICROSCOPES, AUTOMATED CHEMICAL ANALYSIS SYSTEMS, CHEMICAL TYPEWRITERS, BEHAVIORAL RESEARCH INSTRUMENTATION. THE WRAIR MAINTAINS LABORATORY AND RESEARCH FACILITIES AT FT MEADE MD, EDGE-WOOD ARSENAL, MD, SEATO HQ, BANGKOK, THAILAND, AND BRAZIL, S.A. THE WRAIR IS CAPABLE OF CONDUCTING RESEARCH IN A VAST NUMBER OF AREAS.

# INSTALLATION WHITE SAND MISSILE RANGE

WHITE SANDS MR, N.M.

C.O. MG ARTHUR H. SWEENEY TECH. DIR. DR. RICHARD H. DUNCAN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	94.021	95.444
TOTAL PROCUREMENT	3.168	3.497
TOTAL O&M	1.821	1.659
TOTAL OTHER	12.101	12.163
TOTAL ANNUAL LAB	111.111	112.763
TOTAL INHOUSE	91.240	90.593
TOTAL INHOUSE RDT&E	74.340	73.495
ANNUAL OPERATING COST	23.380	25.764

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	1181	6	1116	65
CIVILIAN	3594	6	441	3153
TOTAL	4775	12	1557	3218

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN		REAL	PROP
4458509	1407.139	444.518	2794.645	4646.302	169.507	155.310

## ...MISSION

MISSION-OPERATE A NATIONAL MISSILE RANGE FOR SUPPORT OF ALL APPROVED MISSILE AND RELATED TEST PROGRAMS. INDEPENDENTLY TEST AND EVALUATE ARMY MISSILE AND ROCKET SYSTEMS. ENGINEER AND DEVELOP RANGE INSTRUMENTATION SYSTEMS FOR GATHERING TEST DATA.

## ...CURRENT IMPORTANT PROGRAMS

PULSE-DOPPLER RADAR APPLICATIONS  
DISTANT OPTICAL ATTITUDE MEASURING SYSTEM  
TRANSPONDER DEVELOPMENT  
LASER RANGING AND TRACKING SYSTEM  
COHERENT BEACON CHECKOUT SYSTEM

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

GROUND AND FLIGHT SAFETY. OBTAINING FLIGHT TRAJECTORY AND EVENT DATA. RECOVERING MISSILES OR PORTIONS THEREOF. REDUCING AND PUTTING INTO READABLE FORMS DATA COLLECTED BY RANGE INSTRUMENTS. ENGINEERING AND DEVELOPMENT OF RANGE INSTRUMENTATION. INDEPENDENTLY TEST AND EVALUATE ARMY WEAPONS SYSTEMS. EVALUATE GUIDANCE AND CONTROL SYSTEMS, STRUCTURAL INTEGRITY, PROPULSION SYSTEMS, ELECTROMAGNETIC RADIATION EFFECTS. ANALYSIS OF CHEMICAL AND METALLOGRAPHIC EFFECTS, MICROBIOLOGICAL EFFECTS, CLIMATIC ENVIRONMENTAL EFFECTS. TEST AND EVALUATE WARHEADS AND SPECIAL WEAPONS. WEAPONS SIMULATION. NUCLEAR EFFECTS TESTING. COUNTER-COUNTER MEASURES TESTING. ELECTRONIC AND OPTICAL TRACKING SENSORS AND DATA TRANSMISSION REQUIRED TO PROVIDE TEST DATA ON MISSILES AND RELATED PROGRAMS.

# INSTALLATION YUMA PROVING GROUND

YUMA, ARIZONA

C.O. COL NORMAN L. ROBINSON TECH. ADV. FLOYD E. WATTS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	11.508	11.732
TOTAL PROCUREMENT	8.737	10.630
TOTAL O&M	0.542	0.480
TOTAL OTHER	3.866	3.798
TOTAL ANNUAL LAB	24.653	26.640
TOTAL INHOUSE	24.653	26.640
TOTAL INHOUSE RDT&E	11.508	11.732
ANNUAL OPERATING COST	9.436	10.422

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	436	13	92	344
CIVILIAN	802	0	89	713
TOTAL	1238	13	181	1057

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL REAL PROP	EQUIP	
1086989	166.267	75.944	179.028	421.239	85.771	55.357

...MISSION  
 PLAN, CONDUCT, RPT ENG TEST AIRDROP MAT AND LONG RANGE TUBE ARTY  
 DESERT ENVIRONMENT TEST OF ARMY MATL AS DIRECTED  
 PLAN, CONDUCT, RPT ENG DESIGN PROC AND PCST PRCD TEST AS DIRECTED  
 PLAN, CONDUCT, RPT ENG DISIGN TEST OF AIRCRAFT WEAPONS SYSTEM

...CURRENT IMPORTANT PROGRAMS  
 AIRCRAFT RECOVERY KIT  
 TRUCK, 1/4 TON XM705  
 HET 70  
 CHEYENNE AJ56A SUPPORT  
 2.757 BASELINE ACCURACY

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
 BALLISTIC MEASUREMENT RANGES  
 ENG TEST FACILITIES  
 VEHICLE FIELD TEST FACILITIES  
 TEST COURSES  
 DESERT TERRAIN TEST AREAS  
 CONTROLLED IMPACT TEST FACILITY  
 INSTRUMENTED DROP ZONES  
 RADIO TELEMETRY  
 DATA PROCESSING CENTER  
 RANGE TIMING  
 OPTICAL PHOTO ENG FACILITIES

# INSTALLATION ENVIRONMENTAL PREDICTION RESEARCH FACILITY MONTEREY, CA.

C.O. CDR G.D. HAMILTON

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	1.079	0.754
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.002	0.000
TOTAL OTHER	0.077	0.200
TOTAL ANNUAL LAB	1.158	0.954
TOTAL INHOUSE	0.885	0.683
TOTAL INHOUSE RDT&E	0.806	0.483
ANNUAL OPERATING COST	0.076	0.095

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	16	1	7	9
CIVILIAN	27	1	15	12
TOTAL	43	2	22	21

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
0	0.806	0.843	6.351	8.000	0.000	0.195

...MISSION  
CONDUCT RESEARCH AND DEVELOPMENT, DIRECTED TOWARDS PROVIDING EFFECTIVE LOCAL AND REGIONAL ENVIRONMENTAL ANALYSIS AND PREDICTION TECHNIQUES AND PROVIDE PLANNING, MODELING AND EVALUATION SERVICES FOR THE NAVAL WEATHER MODIFICATION PROGRAM.

...CURRENT IMPORTANT PROGRAMS  
COMPUTER SIMULATION OF FOG/CLOUD AND PRECIP. MICROPHYSICAL PROCESSES  
IMPROVED TECHNIQUES FOR APPLICATIONS OF ENVIRONMENTAL SATELLITE DATA.  
IMPROVED MESOSCALE PREDICTION TECHNIQUES (MEDITERRANEAN, TYPHOONS ETC.)  
IMPROVED WEATHER DATA PRESENTATION METHODS.  
HYDRODYNAMICAL NUMERICAL MODELLING OF WATER LEVELS AND CURRENTS

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
CDC 3100 COMPUTER AND PERIPHERAL EQUIPMENT.  
IBM 1130 COMPUTER AND PERIPHERAL EQUIPMENT  
METEOROLOGICAL/OCEANOGRAPHIC DATA DISPLAY SYSTEM  
IN-HOUSE DOCUMENTATION FACILITIES (MTST, PLATE MAKER, OFFSET PRESS, ETC.)  
20,000 VOLUME TECHNICAL LIBRARY OF ENVIRONMENTAL PUBLICATIONS  
IN-HOUSE GRAPHIC ARTS AND DRAFTING FACILITIES.  
CALMA DIGITIZER  
CALCOMP 565 PLOTTER



INSTALLATION NAVAL AEROSPACE MEDICAL RESEARCH LABORATORY PENSACOLA, FL.  
C.O. CAPT N.W. ALLEBACH TECH. ADV. DR. A. GRAYBIEL

PROGRAM	PROGRAM DATA B: FISCAL YEAR (MILLION \$)	
	1972	1973
	(ACTUAL)	(ACT + EST)
TOTAL RDT&E	3.408	3.393
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.300	0.321
TOTAL ANNUAL LAB	3.708	3.714
TOTAL INHOUSE	3.708	3.714
TOTAL INHOUSE RDT&E	3.408	3.393
ANNUAL OPERATING COST	1.091	0.891

PERSONNEL	PERSONNEL DATA (END OF FY 1972)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	31	11	19		12
CIVILIAN	123	17	49		74
TOTAL	154	28	68		86

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)				REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
0	131.787	19.604	11.693	163.084	2.807	2.073

...MISSION  
CONDUCT RESEARCH DEVELOPMENT TEST AND EVALUATION IN AEROSPACE MEDICINE  
AND RELATED SCIENTIFIC AREAS APPLICABLE TO AEROSPACE SYSTEMS

...CURRENT IMPORTANT PROGRAMS  
PHYSIOLOGICAL EFFECTS OF NONIONIZING RADIATION  
HUMAN DYNAMIC RESPONSE TO IMPACT ACCELERATION  
PREVENTION OF DISORIENTATION AND VESTIBULAR DISTURBANCES IN FLIGHT  
AVIATION PERSONNEL PROCUREMENT AND SELECTION  
EVALUATION OF CARDIOVASCULAR DISEASE RISK IN FLIGHT PERSONNEL

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
NONIONIZING RADIATION FACILITY WITH MICROWAVE AND EXTREMELY LOW FIELD  
CAPABILITIES IMPACT ACCELERATION FACILITY EXAMINATION OF FLIGHT PERS  
FOR PHYSICAL FITNESS PSYCHOLOGICAL APTITUDES AND TOLERANCE TO STRESS  
EQUIPPED FOR HUMAN AND ANIMAL EXPERIMENTS IN UNUSUAL FORCE ACOUSTICAL  
ELECTROMAGNETIC AND ATMOSPHERIC ENVIRONMENTS SLOW ROTATION ROOM HUMAN  
DISORIENTATION DEVICE CORIOLIS ACCELERATION PLATFORM SHIP MOTION SIMU-  
LATOR STILLE-WERNER CHAIR OFF VERTICAL ROTATING CHAIR ELECTRON MICRO-  
SCOPE SUPER CONDUCTING MAGNET ANACHOIC CHAMBER ELECTRIC POSTURE TABLE  
VERTICAL OSCILLATOR REVERBERANT CHAMBER PERIODIC ANFULAR ROTATOR CINE  
GLOBE OPTOKINETIC STIMULATOR ULTRACENTRIFUGE VECTORCARDIOGRAPH LOW  
PRESSURE CHAMBER BALLISTOCARDIOGRAPH X-RAY VIVARIUM WITH OPERATING  
SUITE

INSTALLATION NAVAL AEROSPACE RECOVERY FACILITY

EL CENTRO, CA.

C.O. CAPT CLARENCE E. RICH TECH. DIR. HOWARD C. FISH

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	2.447	2.588
TOTAL PROCUREMENT	2.687	2.375
TOTAL O&M	0.370	0.330
TOTAL OTHER	1.962	2.000
TOTAL ANNUAL LAB	7.466	7.293
TOTAL INHOUSE	6.496	6.488
TOTAL INHOUSE RDT&E	2.347	2.513
ANNUAL OPERATING COST	1.400	1.400

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	166	1	9	157
CIVILIAN	110	0	24	86
TOTAL	276	1	33	243

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN		OTHER	REAL PROP
101290	44.000	10.000	263.000	317.000	8.598	3.758

...MISSION

DEVELOP TEST AND EVAL PARACHUTES AND RELATED ASSY HUMAN ESCAPE METHODS AND SYS RETARD AND RECON SYS AND RESCUE SURVIVAL AND PERSONNEL SAFETY EQUIP STABILIZATION RETARD AND RECOV SYS FOR LAY-DOWN WEAPONS AIRCRAFT MISSILE AND CAPSULE ASSY AND SPECIAL LOG AERIAL DELIVERY METH TECH EQUIP

...CURRENT IMPORTANT PROGRAMS

LEAD LAB ON SEU-3/A ESCAPE SYSTEM FOR AV8A HARRIER AIRCRAFT  
HELO ESCAPE AND PERSONNEL SURVIVAL ENCAPSULATED AND INDIVIDUAL ESCAPE AIRCREW ESCAPE RECOVERY CAPABILITY (AERCAB)  
MAXIMUM PERFORMANCE ESCAPE SYSTEM  
GUNFIRED MISSILE RETARDATION SYSTEM

...FUNCTIONS/EQUIPMENT/CAPABILITIES

DROP TEST RANGE LAND AND SALT WATER INST WITH SPACE POSITION, LONG RANGE PHOTO, CCTV, TELEMETRY, DATA PROC, RAWIN, WHIRL AND DROP TEST TOWERS. RANGE PARAMETERS SEA LEVEL TO 80000 FT SPEED 0-MACH 3. ENGINEERING SERVICES EXPL DEV, ADV AND BASIC DESIGN, INSERV AND TEST ENGR. MATL LAB WITH TEXTILE MATL TEST AND ENVIRONMENTAL ACCEL EQUIP, TENSILE TEST FM 0-20000 LB AND PHYSIOLOGICAL EVAL EQUIP. PHOTO LAB WITH STILL AND MOTION PICTURE 16 MM TO 70MM COLOR UP TO 5000FPS. A/C SUP, TRANSPORT DELIVERY, LOW TO HIGH SPEED VEHICLE DELIVERY, AIR-TO-AIR PHOTO, EJECTION SEAT TEST BED, PERSONNEL DELIVERY AND SIMULATED WEAPON DELIVERY. INDUSTRIAL SHOP-TEST VEHICLE AND PROTOTYPE PARACHUTE AND ASSOCIATED HARDWARE FABRICATION.

INSTALLATION NAVAL AIR DEVELOPMENT CENTER

JOHNSVILLE, PA.

C.O. CAPT H.B. MC CAULEY TECH. DIR. G.L. HOLLINGSWORTH

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL ROT&E	71.889	86.687
TOTAL PROCUREMENT	21.194	18.754
TOTAL O&M	5.599	6.559
TOTAL OTHER	5.520	5.442
TOTAL ANNUAL LAB	104.202	117.443
TOTAL INHOUSE	49.203	50.025
TOTAL INHOUSE ROT&E	37.307	37.702
ANNUAL OPERATING COST	12.815	13.000

PERSONNEL	PERSONNEL DATA (END OF FY 1972)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	PROF	
MILITARY	389	11	107	282	
CIVILIAN	2335	27	1042	1293	
TOTAL	2724	38	1149	1575	

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
831	815.970	26.080	444.075	1206.125	22.912	37.610

...MISSION  
TO BE THE PRINCIPAL NAVY ROT&E CENTER FOR NAVAL AIRCRAFT SYSTEMS

...CURRENT IMPORTANT PROGRAMS  
SHIP AIR SYSTEMS INTEGRATION (SASI)  
LIGHT AIRBORNE MULTI-PURPOSE SYSTEMS (LAMPS)  
ADVANCED ACOUSTIC SENSORS  
HELICOPTER SENSOR SYSTEMS  
AIRCREW LIFE SUPPORT SYSTEMS, PROTECTIVE CLOTHING AND DEVICES

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
RSCH, DESIGN, DEVELOP, TEST, LAB AND FLIGHT EVAL. LONG-RANGE AIR WARFARE STUDIES, THEORETICAL ANAL, ENGIN ANAL AND FEAS PROTOTYPE DEVELOP OF SYS IN ABN ASW, ATTACK CARRIER WARFARE AND OCEAN SURVEILLANCE ENGIN ANAL ON AERO SYSTEM COMP AND AREAS OF TECHNOLOGY IN ABN ASW SYSTEMS COMMUNICATI ONS, NAVIG, DIGITAL COMPUTATION, COUNTERMEAS, AEW, FC, AEROSPACE MED, BIOPHYSICAL EFFECTS OF ACCELERATION, HUMAN FACTORS, AIRCREW PERSONAL AND SAFETY EQUIP SPEC A/C CONFIG CONTROL SYSTEM, ABN WEAPONS HAND EQUIP, ABN PHOTO EQUIP, MATERIALS AND PROCESSES USED IN A/C AIRFRAME STRUCTURES AND SUPPORT TO OTHER ACTIVITIES AS DIRECTED.

INSTALLATION NAVAL AIR ENGINEERING CENTER

PHILADELPHIA, PA.

C.O. CAPT. C.T. FROSCHER TECH. DIR. J.M. DUNFORD

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	12.813	11.905
TOTAL PROCUREMENT	37.029	25.972
TOTAL O&M	24.601	16.864
TOTAL OTHER	4.554	3.210
TOTAL ANNUAL LAB	78.997	57.951
TOTAL INHOUSE	46.283	40.954
TOTAL INHOUSE RDT&E	8.162	7.583
ANNUAL OPERATING COST	9.338	9.401

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	37	0	15	22
CIVILIAN	2198	4	406	1792
TOTAL	2235	4	421	1814

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
560	1373.426	177.625	723.209	2274.260	32.293	17.039

...MISSION

CONDUCT A PROG. OF RDT&E, SYS. INTEGRATION, LIMITED PROD'N, PROCUREMENT & FLEET ENGINEERING SUPP. IN LAUNCHING, RECOVERY & LANDING AIDS FOR A/C IN NAVAL INTELLIGENCE PROCESSING SYSTEMS & IN GROUND SUPPORT EQUIP. FOR A/C, AIRBORNE WEAPONS SYS. & NAVAL INTELLIGENCE PROCESSING SYS.

...CURRENT IMPORTANT PROGRAMS

SHIPBOARD RECOVERY OF HELICOPTERS AND V/STOL  
SHIPBOARD STORED ENERGY ROTARY DRIVE CATAPULT  
VERSATILE AUTOMATIC SHOP TESTER  
AIRCRAFT NOISE SUPPRESSION PROGRAM  
INTEGRATED OPERATIONAL INTELLIGENCE CENTER FOR CVA - 69

...FUNCTIONS/EQUIPMENT/CAPABILITIES

CONDUCT RDT&E ON A/C. LAUNCHING AND RECOVERY EQUIP., VISUAL LANDING AIDS  
NAVAL INTELLIGENCE PROCESSING SYSTEMS, GROUND SUPPORT EQUIP. AND RELATED  
SYS. PROVIDE FLEET SUPPORT FOR INST'LD EQUIP. DETERMINE SUPP. EQUIP.  
REQUIREMENTS BY PERFORMING ANALYSES OF END-ITEMS. MANAGE TEST PROGRAMS  
FOR EQUIP. TESTED ON VERSATILE AVIONICS SHOP TEST SYSTEM. MACHINE SHOP  
WITH CONVENTIONAL AND AUTOMATED MACHINE TOOLS CAPABLE OF PROTOTYPE AND  
LIMITED PRODUCTION. IBM 750/50 COMPUTER FOR ENGINEERING ANALYSES. LANDING  
MAT TEST FACILITY FOR FULL SCALE SIMULATION OF RUNWAY LOADING. TEST  
FACILITY FOR EVAL. OF WIRE ROPE COMPONENTS. TEST LAB FOR DEVELOPMENT  
TESTING OF HYDRAULIC, PNEUMATIC AND ELECTRICAL EQUIP. UNDER CONDITIONS  
SIMULATING FLEET USE. TEST AND EVAL SITE FOR NAV INTELL PROCESSING SYS.  
VACUUM FURNACE FOR HEAT TREATING. ELECTRON BEAM WELDER. CRYOGENICS FAC.

# INSTALLATION NAVAL AIR PROPULSION TEST CENTER

TRENTON, N.J.

C.O. CAPT A.D. WILLIAMS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	11.233	13.193
TOTAL PROCUREMENT	3.000	4.700
TOTAL O&M	0.016	0.010
TOTAL OTHER	2.201	2.794
TOTAL ANNUAL LAB	16.450	20.607
TOTAL INHOUSE	11.052	13.072
TOTAL INHOUSE RDT&E	7.425	7.700
ANNUAL OPERATING COST	3.596	3.000

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	
MILITARY	10	0	9	1
CIVILIAN	690	0	158	532
TOTAL	700	0	167	533

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
66	410.937	51.800	136.000	598.737	45.076	13.600

...MISSION  
TO TEST AND EVALUATE AIRCRAFT PROPULSION SYSTEMS-THEIR COMPONENTS AND ACCESSORIES AND FUELS AND LUBRICANTS AND TO PERFORM APPLIED RESEARCH AND DEVELOPMENT LEADING TO CORRECTION OF DESIGN DEFICIENCIES AND SERVICE PROBLEMS

...CURRENT IMPORTANT PROGRAMS  
KF401-PW-400 PERFORM ALT AND ENVIRONMENTAL DEVELOPMENT TEST AND EVALUATE IF34-GE-2 QUAL TESTS FOR PERFORMANCE ALT-ENVIRONMENTAL CONDITIONS  
TF30-P&412 PERFORM QUAL TESTS IAW MIL-E-5007 SPEC  
AVN FUELS AND LUBES MIL-L-23699 CHARACTERISTICS-SPEC-TESTS AND QUALS  
YT400-CP-400 ENVIRONMENTAL QUAL TESTS

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
PROVIDE A TEST AND EVALUATION CENTER FOR AIRCRAFT PROPULSION SYSTEMS AND PROPULSION RELATED COMPONENTS. ENVIRONMENTAL CONDITIONS OF FLIGHT AND SERVICE ARE SIMULATED IN TEST CELLS-ON TEST BENCHES-OR IN THE LABORATORY THE TURBOJET-FAN-LARGE CELLS CAN SIMULATE ALTITUDES FROM SEA LEVEL TO 80000 FT WITH TEMPERATURES FROM MINUS 65 DEG TO PLUS 320 DEG F. THRUST STANDS INSTALLED ARE CAPABLE OF MEASURING THRUST TO 50000 LBS. THESE CELLS ARE FULLY CAPABLE OF TESTING THE LARGER JET ENGINES NOW IN NAVY SERVICE. THE TURBOSHAFT CELLS ARE CAPABLE OF SIMULATING ALTITUDES FROM SL TO OVER 40000 FT WITH SPECIFICATION RANGE OF TEMPERATURES. TEST CELL FACILITIES EXIST FOR COMPLETE RANGE OF SHAFT POWER ENGINES WITH SUB FACILITIES FOR TEST AND EVALUATION OF SHAFT ENGINE COMPONENTS-FUELS-LUBRICANTS - AUX POWER SYSTEMS AND ACCESSORIES

INSTALLATION NAVAL AIR TEST CENTER

PATUXENT RIVER, MD.

C.O. RADM ROY M. ISAMAN TECH. DIR. JOHN B. PARADIS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	34.713	32.833
TOTAL PROCUREMENT	26.799	23.572
TOTAL OEM	6.048	5.098
TOTAL OTHER	22.214	22.171
TOTAL ANNUAL LAB	89.774	83.674
TOTAL INHOUSE	74.328	69.850
TOTAL INHOUSE RDT&E	31.014	29.326
ANNUAL OPERATING COST	26.680	28.429

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	911	1	205	706	
CIVILIAN	2042	5	420	1622	
TOTAL	2953	6	625	2328	

ACRES	SPACE AND PROPERTY			CCST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
6872	748.000	216.948	3101.833	4066.781	111.589	40.050

#### ...MISSION

COORDINATE & PERFORM TEST & EVAL OF AIRCRAFT WEAPONS SYSTEMS, THEIR COMPONENTS & RELATED EQUIPMENT, CONDUCT TEST PILOT TRAINING, PROVIDE TECHNICAL ADVICE & ASSISTANCE TO BIS NASC CONTRACTORS, ETC.

#### ...CURRENT IMPORTANT PROGRAMS

EVALUATION NEW AIRCRAFT F14 S3A AD1J SH3D LAMPS A7 A4M EP3E A6E//  
CHECKOUT ALL AIRCRAFT IN AIMS AIRSPEED/ALTIMETER SYSTEMS//CHECKOUT ALL  
ACLS//DEVELOPMENT & EVAL OF ASW SYSTEMS TACTICAL SUPPORT CENTER P3C CV  
TSC/EVAL GROUND SUPPORT EQUIP VAST HUMAN FACTORS GRAN HEADS UP DISPLAY  
SYSTEMS//ELECTRONIC WARFARE SYS TRAM CHARGER BLUE EA6A//

#### ...FUNCTIONS/EQUIPMENT/CAPABILITIES

DEVELOP & TEST CONCEPTS FOR OPERATING AIRPLANES FROM CARRIERS//EVAL  
AIRCRAFT MAINTENANCE & RELIABILITY// PERFORM ACCELERATED SERVICE TESTS/  
PERFORM ELECTROMAGNETIC COMPATIBILITY TESTS//DEVEL & EVAL AIRCRAFT ELEC  
SYSTEMS//RESEARCH & DEVEL AIRCRAFT INSTRUMENTATION & DATA GATHERING  
DEVICES & SYSTEMS//ESTABLISH STORE RELEASE ENVELOPES//RECOMMEND DESIGN  
CHANGES TO AIRCRAFT//CONDUCT NAVY PRELIMINARY EVAL//MAJOR FACILITIES//  
CATAPULTS & ARRESTING GEARS//INTERFERENCE TEST HANGAR//AVIONICS LAB//  
INSTRUMENTED THEODOLITE RADAR & ECM RANGE/EXTENSIVE ELEC & ENVIRONMENTAL  
LABS//EXTENSIVE INSTRUMENTATION. REAL TIME TELEMETRY, AND COMPUTER  
CAPABILITY//ENGINE TEST CELLS//OVER 120 TEST AIRCRAFT//LONG RUNWAYS//  
AIRCRAFT WEIGHING SCALES//HYDROFOIL SEAPLANE TEST CAPABILITY//SURFACE  
EFFECTS SHIPS TEST FACILITIES.

# INSTALLATION NAVAL AIR TEST FACILITY (SHIP INSTALLATIONS) LAKEHURST, N.J.

C.O. CAPT CHARLES L. AXELL TECH. DIR. NICHOLAS IVANOVIC

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	1.371	1.062
TOTAL PROCUREMENT	2.611	2.439
TOTAL O&M	4.327	5.006
TOTAL OTHER	1.446	1.912
TOTAL ANNUAL LAB	9.775	10.419
TOTAL INHOUSE	2.000	10.414
TOTAL INHOUSE RDT&E	1.000	1.062
ANNUAL OPERATING COST	3.5	3.712

PERSONNEL	PERSONNEL DATA (ENR BY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHOS		
MILITARY	134	0	7	127
CIVILIAN	405	0	74	331
TOTAL	539	0	81	458

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)					
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
2500	59.204	29.598	91.906	180.708	34.172	7.431

## ...MISSION

TO CONDUCT TESTS AND EVAL OF LAUNCHING RECOVERY AND VISUAL LANDING AIDS SYSTEMS AND RELATED EQUIPMENT PROVIDE TEST SITES FACILITIES FOR DEV TEST OF SI EQUIPMENT CONDUCT R AND D OF EQUIP AND INSTR USED IN TEST AND EVALUATION OF SI EQUIPMENT

## ...CURRENT IMPORTANT PROGRAMS

EVAL OF INTEGRATED CATAPULT CONTROL STATION  
HELICOPTER SUPPORT TEST AND EVALUATION CENTER  
CVAN-68 JET BLAST DEFLECTOR DEV AND EVAL PROGRAM  
CVAN-68 FLUSH DECK NOSE GEAR LAUNCH DEV AND EVAL PROGRAM  
CVAN-68 DEV AND EVAL PROGRAM

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

CARRIER CONFIGS DUPLICATED AND SERV OPS SIMULATED WITH NAVAL ACFT  
CAT DEV FAC SHIPBOARD USED TO DEV EVAL NEW ACFT-CARRIER LAUNCH SYSTEM  
CAT DEV FAC SHOREBASED EXPEDITIONARY CAT FOR DEV MARINE CORPS  
SATS CONCEPT AND REQUIRED ACFT LAUNCHING ACCESSORIES  
ARRESTING GEAR DEV FAC SHIPBOARD CONFIGURED TO SIMULATE STANDARD  
SHIPBOARD ARRESTING GEAR INSTAL MK5 MOD 3 AND MK7 MOD 1 2 AND 3  
TEST TRACK FAC 5 TO DEV AND/OR EVAL SHOREBASED AND SHIPBRD ARRS SYS  
STEAM PLANT FAC SUPPLIES HIGH PRESS STEAM TO SHIPBOARD CAT SITES  
HYDRAULIC TEST FAC CONSISTS OF TWO HYDRAULIC TEST BENCHES  
DIGITAL AND ANALOG COMPUTATIONAL FAC PROVIDES FOR SCIENTIFIC PROBLEM  
SOLUTION MIS AND SCIENTIFIC DATA REDUCTION OF ACQUIRED DATA  
INSTR MAIN/CALIB FAC MOTION/STILL PHOTO CAP AND FILM DEV LAB

# INSTALLATION NAVAL BLOOD RESEARCH LABORATORY

CHELSEA, MS.

C.O. CDR CESARE R. VALERT

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972	1973
	(ACTUAL)	(ACT + EST)
TOTAL RDT&E	0.332	0.328
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.137	0.171
TOTAL ANNUAL LAB	0.469	0.499
TOTAL INHOUSE	0.469	0.499
TOTAL INHOUSE RDT&E	0.332	0.328
ANNUAL OPERATING COST	0.070	0.060

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	10	4	6	4
CIVILIAN	13	0	0	13
TOTAL	23	4	6	17

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN		REAL PROP	EQUIP
0	6.000	0.160	1.000	7.160	0.000	0.473

## ...MISSION

CONDUCT RESEARCH AND DEVELOP METHODS FOR LONG-TERM PRESERVATION OF BLOOD AND BLOOD PRODUCTS AND EVALUATION OF USEFULNESS IN OPERATIONAL AREAS ON LAND AND AT SEA AND IN HOSPITALS

## ...CURRENT IMPORTANT PROGRAMS

EVALUATE IMPROVED METHODS FOR PRESERVING RED CELLS  
 EVALUATE METHODS FOR PRESERVING PLATELETS AND WHITE CELLS  
 EVALUATE IMPROVED METHODS FOR COMPONENT THERAPY  
 CLINICAL EVALUATION OF FROZEN RED CELLS AND PLATELETS  
 EVALUATE METHODS OF REJUVENATING OUTDATED RED CELLS

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

HOLD FOR DONOR AND RARE BLOOD BANK STORAGE CAPABILITY  
 LIQUID AND FREEZE PRESERVATION EQUIPMENT FOR RED CELLS, WHITE CELLS, AND PLASMA COMPONENTS  
 EQUIPMENT TO BIOLOGICALLY EVALUATE THE VIABILITY AND FUNCTION OF RED CELLS  
 EQUIPMENT TO BIOLOGICALLY EVALUATE THE VIABILITY AND FUNCTION OF WHITE BLOOD CELLS  
 EQUIPMENT TO BIOLOGICALLY EVALUATE THE VIABILITY AND FUNCTION OF PLATELETS



# INSTALLATION NAVAL CIVIL ENGINEERING LABORATORY

PORT HUENEME, CA.

C.O. CAPT E.M. SAUNDERS TECH. DIR. WILLIAM F. BURKART

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	9.700	10.773
TOTAL PROCUREMENT	0.069	0.073
TOTAL O&M	1.361	1.350
TOTAL OTHER	0.657	0.667
TOTAL ANNUAL LAB	11.787	12.863
TOTAL INHOUSE	8.474	9.155
TOTAL INHOUSE RDT&E	6.833	7.542
ANNUAL OPERATING COST	1.637	1.793

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	21	1	9	12
CIVILIAN	361	39	196	165
TOTAL	382	40	205	177

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
22	120.352	21.977	31.548	173.877	5.733	5.679

## ...MISSION

MISSION OF LABORATORY IS TO BE THE PRINCIPAL NAVY RDT&E CENTER FOR SHORE AND SEAFLOOR FACILITIES AND THE SUPPORT OF MARINE CORPS CONSTRUCTION FORCES

## ...CURRENT IMPORTANT PROGRAMS

NAVY SHORE FACILITIES SUPPORT. NAVY SEAFLOOR INSTALLATIONS. AMPHIBIOUS & ADVANCED BASE TECHNOLOGY. ENVIRONMENTAL PROTECTION. ORGANIC MATERIALS. MATERIAL CONTROL DISTRIBUTION & STORAGE. DEEP OCEAN TECHNOLOGY. DEVELOPMENTS ASSIGNED BY SUPT OF SALVAGE. INDEPENDENT EXPLORATORY DEVELOPMENT & INDEPENDENT RESEARCH RDT&E FOR SANGUINE, AIRFORCE, MARINE CORPS, ARMY

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

PRESSURE VESSEL FACILITY WITH 72-INCH-ID BY 10 FT DEEP PRESSURE VESSEL SUSTAINING PRESSURES UP TO 5500 PSI DIVING LOCKER & EQUIPMENT FOR 10 DIVERS. SEAFLOOR SOILS, MATERIALS, SOLID STATE, METALLURGICAL, PHOTOELASTIC, SNOW AND ICE LABORATORIES. UNDERSEA DIVER CONSTRUCTION VEHICLES (CAU, BTU & NEMO) & WARPING TUG & CORER FOR TAKING SAMPLES AT WATER DEPTHS TO 6000 FT. & INSTU TESTING EQUIPMENT FOR DEEP OCEAN INCLUDING A VANE SHEAR DEVICE, CONE PENETROMETER, 10 FT CORER, PLATE BEARING TEST DEVICE & FOUNDATION MONITOR. A MOTION COMPENSATING LIFTING SYSTEM CAPABLE OF LIFTING 40,000 LBS FROM 6000 FT DEPTH. PHOTOGRAPHIC FACILITY. ENVIRONMENTAL PROTECTION MONITORING CAPABILITY. CDC-8090 COMPUTER/TERMINAL WITH A HIGH SPEED READER & LINE PRINTER, DIGITAL MAG TAPE & PAPER TAPE T/O ANALOG TAPE ADC & DAC CONVERSION & A PEN PLOTTER & TIE WITH CDC-6600.

# INSTALLATION NAVAL CLOTHING AND TEXTILE RESEARCH UNIT

NATICK, MS.

C.O. CDR J.L. POOK

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	0.558	0.682
TOTAL PROCUREMENT	0.020	0.080
TOTAL O&M	0.607	0.645
TOTAL OTHER	0.020	0.022
TOTAL ANNUAL LAB	1.205	1.429
TOTAL INHOUSE	1.205	1.429
TOTAL INHOUSE RDT&E	0.558	0.682
ANNUAL OPERATING COST	0.160	0.165

PERSONNEL	PERSONNEL DATA (END OF FY 1972)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	PROF	
MILITARY	1	0	1	0	
CIVILIAN	60	0	23	37	
TOTAL	61	0	24	37	

ACRES	SPACE AND PROPERTY				COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP	
2	10.000	7.000	3.000	20.000	0.275	0.600	

## ...MISSION

CONDUCT RESEARCH, DEVELOPMENT, TEST, AND EVALUATION AND GIVE ENGINEERING SUPPORT IN CLOTHING, TEXTILES, AND RELATED FIELDS ASSOCIATED WITH SERVICE CLOTHING AND ENVIRONMENTAL AND SPECIAL PROTECTIVE CLOTHING

## ...CURRENT IMPORTANT PROGRAMS

EXTREME LOW-TEMPERATURE CLOTHING  
 STATIC-ELECTRICITY PROPENSITY OF CLOTHING  
 AIRCRAFT-CARRIER FLIGHT-DECK CLOTHING  
 COLD-WEATHER HANDWEAR  
 CRASH-CREW FIRE-PROTECTIVE CLOTHING

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

### MAJOR FUNCTIONS:

CONDUCT RDT&E IN TEXTILE MATERIALS, LEATHER, PLASTICS, AND RUBBER  
 DEVELOP NAVY CLOTHING, ACCESSORIES, AND RELATED ITEMS  
 CONDUCT STUDIES IN ENVIRONMENTAL SCIENCES AND LIFE SUPPORT SYSTEMS  
 PREPARE SPECIFICATIONS FOR CLOTHING, TEXTILES, FOOTWEAR AND RELATED ITEMS  
 COORDINATE STANDARDIZATION IN CLOTHING  
 PROVIDE TECHNICAL SUPPORT TO ALL DOD AGENCIES IN NAVY CLOTHING AREAS  
 MAJOR EQUIPMENT AND FACILITIES  
 TEXTILE LABORATORIES  
 COLD TEST CHAMBERS  
 HYDRO-ENVIRONMENT SIMULATOR  
 HIGH-INTENSITY THERMAL TEST UNIT

# INSTALLATION NAVAL DENTAL RESEARCH INSTITUTE, NTC

GREAT LAKES, IL

C.O. CAPT N.J. KEENE

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	0.489	0.374
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.271	0.279
TOTAL ANNUAL LAB	0.760	0.653
TOTAL INHOUSE	0.742	0.639
TOTAL INHOUSE RDT&E	0.489	0.374
ANNUAL OPERATING COST	0.092	0.100

PERSONNEL	PERSONNEL DATA (END OF FY 1972)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	20	1	8		12
CIVILIAN	12	2	8		4
TOTAL	32	3	16		16

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
1	8.900	5.100	6.000	20.000	0.000	0.359

...MISSION  
CONDUCT RESEARCH IN DENTAL PROBLEMS OF ORAL HEALTH IN NAVAL AND MARCORPS PERSONNEL AND DELIVERY OF DENTAL CARE

...CURRENT IMPORTANT PROGRAMS  
ORAL HEALTH OF NAVAL PERSONNEL  
CHEM AND ENZYMOLOGY OF CARIES IN CARIES IMMUNE RECRUITS  
BACTERIOLOGY OF SALIVA AND PLAQUE OF CARIES IMMUNE RECRUITS  
SELF SUPPORTED MOBILE DENTAL VAN FOR FIELD AND GARRISON  
HISTOPATHOLOGY OF DENTAL PULP AND TOOTH STRUCTURE

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
ASSESS DENTAL HEALTH STATUS OF RECRUITS IMPROVE DISEASE PREVENTION AND CARE PROCEDURES INCREASE QUALITY AND QUANTITY OF CARE IN COMBAT TROOPS INCLUDING FACIAL INJURIES DEFINE ORAL DISEASE ETIOLOGY AND DEVELOPMENT OF SAFE THERAPEUTIC METHODS COMPUTERIZATION OF DENTAL PROCESSING PROCEDURES TRACE ELEMENT ANALYSIS OF TOOTH STRUCTURE HISTOPATHOLOGICAL EVALUATION OF ORAL TISSUE  
AMINOACID ANALYZER ATOMIC ABSORPTION SPECTROPHOTOMETER FLUORIDE ELECTRODE SCINTILLATION COUNTER MOBILE DENTAL TREATMENT UNIT  
4K MEMORY CORE COMPUTER BACTERIAL TAXONOMY VACCINE PRODUCTION AND TESTING DENTAL EQUIPMENT DESIGN AND FABRICATION

INSTALLATION NAVAL ELECTRONICS LABORATORY CENTER

SAN DIEGO, CA.

C.O. CAPT N.D. HARDING, JR. TECH. DIR. DR. C.E. BERGMAN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	32.774	35.680
TOTAL PROCUREMENT	5.498	5.332
TOTAL O&M	11.783	9.599
TOTAL OTHER	9.270	7.418
TOTAL ANNUAL LAB	59.325	58.029
TOTAL INHOUSE	54.713	53.133
TOTAL INHOUSE RDT&E	29.981	32.477
ANNUAL OPERATING COST	12.866	12.960

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PHDS	TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL			
MILITARY	94	2	66	28	
CIVILIAN	1468	61	737	731	
TOTAL	1562	63	803	759	

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)			TOTAL	COST (MILLION \$)	
	LAB	ADMIN	OTHER		REAL PROP	EQUIP
1591	461.555	157.531	221.523	840.609	11.077	36.203

#### ...MISSION

TO BE THE PRINCIPAL NAVY RDT&E CENTER FOR ELECTRONICS TECHNOLOGY AND  
COMMAND CONTROL AND COMMUNICATIONS CONCEPTS AND SYSTEMS

#### ...CURRENT IMPORTANT PROGRAMS

FLEET SATELLITE COMMUNICATION AND DIGITAL INFORMATION EXCHANGE SYSTEMS  
MESSAGE PROCESSING AND DISTRIBUTION SYSTEM FOR CVAN 68 AND 69  
IMPROVEMENT OF FBM COMMUNICATION SYSTEMS  
OPERATIONAL APPLICATIONS OF ELECTRO-OPTICS  
SYSTEM CONCEPTS FOR INTEGRATED WORLD WIDE OCEAN SURVEILLANCE SYSTEM

#### ...FUNCTIONS/EQUIPMENT/CAPABILITIES

FUNCTIONS ARE TO ESTABLISH AND MAINTAIN THE PRIMARY IN-HOUSE RESEARCH  
AND DEVELOPMENT CAPABILITY FOR NAVY AND MARINE CORPS SYSTEMS AND  
TECHNOLOGIES FOR COMMAND CONTROL AND COMMUNICATIONS, ELECTRONIC WARFARE  
ELECTROMAGNETIC SURVEILLANCE, IDENTIFICATION, AND NAVIGATION.  
FACILITIES INCLUDE: ADVANCED COMPUTER SCIENCE CENTER, MICROELECTRONICS  
LAB, ENVIRONMENTAL TEST FACILITY, ELECTRO-OPTICS R&D LAB, MATERIALS  
SCIENCE LAB, SIXTY FOOT TELESCOPE, ANTENNA MODEL RANGES, HUMAN FACTORS  
LAB, SYSTEMS EVALUATION FACILITIES.

INSTALLATION NAVAL EXPLOSIVE ORDNANCE DISPOSAL FACILITY INDIAN HEAD, MD.

C.O. CAPT CHARLES K. NAYLOR TECH. DIR. LIONEL A. DICKINSON

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972	1973
	(ACTUAL)	(ACT + EST)
TOTAL RDT&E	1.532	1.613
TOTAL PROCUREMENT	2.245	2.048
TOTAL O&M	0.002	0.059
TOTAL OTHER	0.784	0.676
TOTAL ANNUAL LAB	4.563	4.396
TOTAL INHOUSE	3.097	3.345
TOTAL INHOUSE RDT&E	0.972	1.022
ANNUAL OPERATING COST	0.751	1.253

PERSONNEL	PERSONNEL DATA (END OF FY 1972)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	73	0	56		17
CIVILIAN	152	1	17		135
TOTAL	225	1	73		152

ACRES	SPACE AND PROPERTY				COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP	
	LAB	ADMIN	OTHER				
1084	50.771	19.797	43.335	113.903	2.851	2.439	

...MISSION

UNDER THE MANAGERSHIP OF SECNAV CONDUCTS THE JOINT SERVICE RDT&E, TECHNICAL INFORMATION, AND EQUIPMENT MANAGEMENT PROGRAMS FOR THE LOCATION, IDENTIFICATION, NEUTRALIZATION, AND DISPOSAL OF EXPLOSIVE LOADED ORDNANCE TO INCLUDE IMPROVISED DEVICES, SUPPORT OTHER GOVT AGENCIES

...CURRENT IMPORTANT PROGRAMS

JOINT SERVICE RDT&E IN EXPLOSIVE ORDNANCE DISPOSAL  
JOINT SERVICE TECHNICAL INFORMATION IN EXPLOSIVE ORDNANCE DISPOSAL  
NAVAL MINE LOCATION AND NEUTRALIZATION  
INITIAL EXAMINATION OF FOREIGN EXPLOSIVE ORDNANCE AND IMPROVISED DEVICES  
IMPROVISED EXPLOSIVE DEVICES

...FUNCTIONS/EQUIPMENT/CAPABILITIES

MULTIDISCIPLINARY RDT&E LABORATORY SPACES AND MODEL SHOPS  
ORDNANCE EXAMINATION FACILITY WITH REMOTELY OPERATED EQUIPMENT AND AN EXTENSIVE RADIOGRAPHIC CAPABILITY  
MAN RATED TEMP CONTROLLED DIVING TANK, 137 METERS OF SEAWATER  
EQUIPMENT DIVING TANK, 3000 METERS OF SEA WATER  
INSTRUMENTED MINE RANGE  
ORDNANCE LIBRARY

# INSTALLATION NAVAL MEDICAL FIELD RESEARCH LABORATORY

CAMP LEJEUNE, N.C.

C.O. CAPT JESSE F. ADAMS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	0.821	0.878
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.005
TOTAL OTHER	0.368	0.370
TOTAL ANNUAL LAB	1.189	1.253
TOTAL INHOUSE	1.189	1.253
TOTAL INHOUSE RDT&E	0.821	0.878
ANNUAL OPERATING COST	0.216	0.265

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	37	4	6	31
CIVILIAN	51	2	11	40
TOTAL	88	6	17	71

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
3	LAB	ADMIN	OTHER	52.471	0.528	0.657
	28.226	8.655	15.590			

## ...MISSION

CONDUCT RESEARCH DEVELOPMENT AND TESTING IN THE MEDICAL DENTAL AND ALLIED SCIENCES WITH PARTICULAR EMPHASIS ON PROBLEMS OF FIELD AND AMPHIBIOUS MEDICINE

## ...CURRENT IMPORTANT PROGRAMS

TROOP HEAT ACCLIMATIZATION AND EVAL OF FIELD WATER PURIFICATION SYSTEMS  
RHABDOMYOLYSIS AND RESPIRATORY ILLNESS IN MARINE RECRUITS  
NGU AND GONORRHEA IN USMC PERSONNEL  
DEV OF MODULAR FIELD AND SHIPBOARD MEDICAL FACILITIES  
VECTOR CONTROL METHODS, EQUIPMENT AND SUPPLIES

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

CONDUCT RESEARCH IN PROBLEMS OF FIELD AND AMPHIBIOUS MEDICINE, DEVELOP TEST AND EVALUATE MEDICAL EQUIP AND SUPPLIES AND CLOTHING AND EQUIPMENT FOR USMC PERSONNEL USE AND PROTECTION  
PRIMARY CAPABILITIES IN APPLIED RESEARCH SPECIFICALLY IN AREAS OF BACT. PHYSIOLOGY, STRESS PHYSIOLOGY, ENTOMOLOGY, ENVIRON BIOLOGY. VIROLOGY, FIELD MEDICAL EQUIP, BIOCHEMISTRY AND ANIMAL INVESTIGATIONS. MAJOR EQUIP OLFACTOMETER, BLAST FACILITY, BALLISTIC RANGE, HIGH SPEED BECKMAN CAMERA, FREQUENCY COUNTERS, MATERIALS LAMINATING PRESS AND SEALERS, SEWING EQUIP SHOP MACHINERY, 2-MAN RESP DISEASE ENVIRON CHAMBER, CLIMATIC CHAMBER, SMALL LOW PRESSURE AND LOW TEMP CHAMER, AUTOANALYZER, OXYGEN ANALYZER, MULTIPLE PHYSIOLOGIC DATA RECORDER, ELECTRONIC PROGRAMMER, FLUOROMETERS, RESPIROMETER, GAS PARTITIONER, PYRHELIOGRAPH, UNRESTRICTED PHOTO CAPABILITY

INSTALLATION NAVAL MEDICAL RESEARCH INSTITUTE

BETHESDA, MD.

C.O. CAPT TOR RICHTER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	4.323	5.546
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	2.220	2.620
TOTAL ANNUAL LAB	6.543	8.166
TOTAL INHOUSE	6.543	8.166
TOTAL INHOUSE RDT&E	4.323	5.546
ANNUAL OPERATING COST	1.222	1.200

PERSONNEL	PERSONNEL DATA (END OF FY 1972)				NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	204	48	106		98
CIVILIAN	207	25	73		134
TOTAL	411	73	179		232

ACRES	SPACE AND PROPERTY				COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP	
4	151.730	21.561	26.590	199.881	4.016	0.623	

...MISSION  
CONDUCT BASIC AND APPLIED RESEARCH AND  
DEVELOPMENT CONCERNED WITH THE HEALTH  
SAFETY AND EFFICIENCY OF NAVAL  
PERSONNEL

...CURRENT IMPORTANT PROGRAMS  
TISSUE TYPING ORGAN TRANSPLANTS AND IMMUNOSUPPRESSION IN RESTORATIVE SURG  
VACCINE DEV FOR CONTROL OF MALARIA AND SCHISTOSOMIASIS  
HEAT AND COLD STRESS IN HYPERBARIC AND HIGH HUMIDITY ENVIRONMENTS  
BEHAVIORAL IN HYPERBARIC ENVIRONMENTS  
DEVELOP AND EVALUATE MEDICAL PERSONNEL TRAINING PROGRAMS

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
BASIC AND DEVELOPMENTAL RESEARCH IN THE BIOPHYSICAL  
DISCIPLINES AFFECTING HUMAN HEALTH SAFETY AND PERFORMANCE INCLUDING  
HUMAN ENVIRONMENTAL STRESS FACILITIES INCLUDING  
HYPERBARIC CHAMBER COMPLEX  
TRANSMISSION AND SCANNING ELECTRON MICROSCOPES  
TISSUE PRESERVATION AND TRANSPLANTATION CAPABILITIES  
RESEARCH BIOCHEMISTRY  
EXPERIMENTAL ANIMAL FACILITIES AND ANIMAL HOUSE

INSTALLATION NAVAL MEDICAL RESEARCH UNIT NO. 1

BERKELEY, CA.

C.O. CAPT D.R. TENYCK

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL ROT&E	0.047	0.055
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.221	0.235
TOTAL ANNUAL LAB	0.268	0.290
TOTAL INHOUSE	0.268	0.290
TOTAL INHOUSE ROT&E	0.047	0.055
ANNUAL OPERATING COST	0.030	0.030

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	16	4	5	11
CIVILIAN	2	0	0	2
TOTAL	18	4	5	13

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	COST (MILLION \$)	
	LAB	ADMIN	OTHER		REAL PROP	EQUIP
0	0.000	0.360	0.000	0.360	0.000	0.000

...MISSION  
TO CONDUCT BASIC RESEARCH IN THE BIOMEDICAL SCIENCES, PROVIDE ESSENTIAL INFORMATION ON MEDICAL PROBLEMS OF MILITARY SIGNIFICANCE AND PROVIDE TRAINING IN RESEARCH TECHNIQUE

...CURRENT IMPORTANT PROGRAMS  
IMPROVED MICROBIOLOGICAL DIAGNOSTIC TECHNIQUES  
NEISSERIA REPOSITORY AND RESEARCH  
COCCIDIOMYCOSIS VACCINE  
HAZARDS OF DEEP WATER SUBMERGENCE  
GENETICS OF VIRUS SURVIVAL

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
BACTERIOLOGY, VIROLOGY AND OTHER FIELDS RELATIVE TO PROBLEMS OF DISEASES OF MILITARY IMPORTANCE. STUDY ENVIRONMENTAL FACTORS AFFECTING HOST RESPONSE TO INFECTION AND INVESTIGATE SPECIFIC AND NONSPECIFIC HOST RESPONSE TO INFECTION. IMMUNOLOGIC AND PHYSIOLOGIC STUDIES ON MENINGITIS. TEST AND IMPROVE COCCIDIODES VACCINE. DEVELOP RAPID DIAGNOSTIC PROCESS FOR ARBO AND RESPIRATORY VIRUSES. STUDY OF OCEAN ENVIRONMENT RELATIVE TO NAVAL TECHNICAL PROGRAMS.



INSTALLATION NAVAL MEDICAL RESEARCH UNIT NO. 2

TAIPEI, TAIWAN

C.O. CAPT R.H. WATTEN CHIEF SCIENTIST R.Q. BLACKWELL

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	1.489	1.559
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.546	0.607
TOTAL ANNUAL LAB	2.035	2.166
TOTAL INHOUSE	2.035	2.166
TOTAL INHOUSE RDT&E	1.489	1.559
ANNUAL OPERATING COST	0.500	0.500

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	35	13	30	5
CIVILIAN	9	2	5	4
TOTAL	44	15	35	9

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
2	32.780	38.674	17.826	89.280	0.101	0.890

...MISSION

CONDUCT RESEARCH AND DEVELOPMENT IN THE BIOMEDICAL SCIENCES PROVIDE DATA ON DISEASES AND MEDICAL PROBLEMS OF MILITARY SIGNIFICANCE. RECOMMEND CONTROL MEASURES AND PROVIDE TRAINING IN R&D TECHNIQUES

...CURRENT IMPORTANT PROGRAMS

INFLUENCE OF NUTRITION ON SUSCEPTIBILITY OF INFECT DIS MORB PERFORMANCE  
STUDIES OF CAPILLARIASIS IN THE PHILIPPINES  
SCHISTOSOMIASIS IN SULAWESI IN INDONESIA  
ETIOLOGY OF FEBRILE ILLNESSES IN INDONESIA  
INFLUENZA SURVEILLANCE

...FUNCTIONS/EQUIPMENT/CAPABILITIES

CLINICAL STUDY OF DIAGNOSIS AND TREATMENT OF TROPICAL DISEASE AND  
EPIDEMIOLOGICAL STUDY OF INFECTIOUS DISEASES. COMPLETE RADIOISOTOPE  
EQUIPMENT AND COMPUTER CAPABILITY PROFICIENCY IN CLINICAL INVESTIGATION  
MICROBIOLOGY MEDICAL PHYSICS MEDICAL ECOLOGY BIOCHEMISTRY PATHOLOGY  
ANIMAL FACILITY

INSTALLATION NAVAL MEDICAL RESEARCH UNIT NO. 3

CAIRO, EGYPT

C.O. CAPT HENRY A. SPARKS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	0.750	0.675
TOTAL PROCUREMENT	0.873	0.619
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.233	0.260
TOTAL ANNUAL LAB	1.864	1.554
TOTAL INHOUSE	1.864	1.554
TOTAL INHOUSE RDT&E	0.758	0.675
ANNUAL OPERATING COST	0.341	0.419

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	31	8	12	19
CIVILIAN	108	4	4	104
TOTAL	139	12	16	123

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)					
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
3	18.242	9.500	2.300	30.042	0.344	0.790

...MISSION  
RESEARCH INTO CAUSES, PATHOGENES, EPIDEMIOLOGY, PREVENTION AND TREATMENT  
ENDEMIC DISEASES IN EGYPT, NORTH AFRICA AND THE MIDDLE EAST AND THE  
CONDUCT OF COLLABORATIVE EDUCATIONAL PROGRAMS WITH BIOMEDICAL SCIENTISTS  
IN EGYPT

...CURRENT IMPORTANT PROGRAMS  
MENINGOCOCCAL VACCINE STUDY  
SCHISTOSOMIASIS PATHOPHYSIOLOGY OF  
RELAPSING FEVER TREATMENT OF  
ARTHROPOD VIRUS ISOLATIONS TICKS AND MOSQUITOES  
THERAPEUTIC DRUG STUDY OF INFECTIOUS DISEASES

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
TECHNION TISSUE PROCESSOR HEWLETT-PACKARD MODEL 9100 CALCULATOR PICKER  
NUCLEAR MAGNASCANNER RENALTRON 4 ATOMIC ABSORPTION SPECTROPHOTOMETER  
UNICAN UV SPECTROPHOTOMETER GAS CHROMATOGRAPH COULTER BLOOD CELL COUNTER  
X-RAY APPARATUS RADIOGRAPH ELECTRONIC CALCULATOR WANG FLUORESCENT  
MICROSCOPE GUILFORD MODEL 240 SPECTROPHOTOMETER ANSCO AUTOCLAVES  
SPECTROPHOTOMETERS CENTRIFUGES ANALYTICAL SCANNER AND INTEGRATION  
FREEZERS REVCO X-RAY FLUORESCENT SPECTROMETER BALANCES NETTLER  
FLUOROMETER CLIMATIZER WALK 12 REFRIGERATOR AND FREEZER PATIENTS WARD TO  
HOSPITALIZE SICK EGYPTIANS PUBLIC WORKS FACILITY WORLD'S MOST COMPLETE  
TICK COLLECTION MODERN LABORATORY TO STUDY DISEASES IN EGYPT AND A  
RESEARCH DETACHMENT IN ETHIOPIA THAT IS ALSO MODERN AND WELL EQUIPPED  
AND WITH WARD SPACES AT THE NEARBY ST. PAUL'S HOSPITAL

C.O. CAPT C. H. MILLER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	0.760	0.714
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.380	0.402
TOTAL ANNUAL LAB	1.140	1.116
TOTAL INHOUSE	1.140	1.116
TOTAL INHOUSE RDT&E	0.760	0.714
ANNUAL OPERATING COST	0.214	0.255

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	38	5	14	24
CIVILIAN	41	2	17	24
TOTAL	79	7	31	48

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
1	22.053	16.716	18.975	57.744	0.387	0.440

...MISSION  
CONDUCT R AND P IN BIOMED SCI PROVIDE DATA ON DISEASE AND MED PROB OF  
MIL IMPORT RECOMMEND CONTROL MEASURES FOR COMMUN DISEASE PROV TRN IN  
RSCH TECH RSCH IN ETIOLOGY TRANS CONTROL AND TREAT OF COMMUN RESPIR  
DISEASE AID MED ACT TO EPIDEMIC RESPIR DISEASE STUD MED PROB OF RECRUIT

...CURRENT IMPORTANT PROGRAMS  
FACTORS INFLUENCING INTERFERON RESPONSE  
ETIOLOGIC AGENTS OF RESPIRATORY DISEASE IN RECRUITS  
MOST STUDIES OF ILLNESS SUSCEPTIBILITY  
EVAL ANTIBACTERIAL AGENTS TO ELIMINATE MENINGOCOCCI IN NASOPHARYNX  
EVAL VARIOUS INFLUENZA VACCINE IN RECRUITS

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
INCUBATORS REFRIGERATION UNITS ULTRACENTRIFUGE LIQUID SCINTILLATION  
SYSTEM OSCILLATOR SPECTROPHOTOMETERS ELECTRON SCOPE GAS CHROMATOGRAPH  
RESEARCH IN ETOL AND CONTROL OF COMMUNICABLE DISEASE MYCOPLASMA  
BACTERIOLOGY BIOCHEMISTRY BIOMETRICS EPIDEMIOLOGY IMMUNOLOGY AND  
VIROLOGY

# INSTALLATION NAVAL MISSILE CENTER

POINT MUGU, CA.

C.O. CAPT E.E. IRISH

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	32.629	40.206
TOTAL PROCUREMENT	11.354	15.092
TOTAL O&M	13.282	15.738
TOTAL OTHER	9.429	9.405
TOTAL ANNUAL LAB	66.694	80.441
TOTAL INHOUSE	54.030	61.648
TOTAL INHOUSE RDT&E	24.472	30.743
ANNUAL OPERATING COST	14.895	17.810

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	638	0	134	504
CIVILIAN	1691	7	521	1170
TOTAL	2329	7	655	1674

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
4	110.756	169.569	754.611	1034.936	25.973	39.490

...MISSION  
TO PERFORM TEST, EVALUATION, DEVELOPMENT SUPPORT AND EXERCISE ENGINEERING  
COGNIZANCE AS ASSIGNED OF NAVAL WEAPONS SYSTEMS AND RELATED DEVICES

...CURRENT IMPORTANT PROGRAMS  
F-14A/PHOENIX DEVELOPMENT TESTING  
AIRBORNE ELECTRONIC COUNTERMEASURE R&D  
ENGINEERING COGNIZANCE OF AIR LAUNCHED WEAPONS  
AIR-TO-AIR, AIR-TO-SURFACE MISSILE PRODUCTION TESTING  
T AND E OF AERIAL AND SURFACE TARGETS

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
PERFORM TESTS AND CONDUCT TECH EVALUATIONS OF NAVAL AIRBORNE WEAPONS  
GUIDED MISSILE SUBSYSTEMS AND RELATED SUPPORT EQUIP, PERFORM BTS TRIPS  
FOR INTERRELATED AIRBORNE WEAPONS SYSTEMS, PERFORM PROD MONITORING TESTS  
OF GUIDED MISSILE LOTS&PROVIDE ENG. COGNIZANCE AND FIELD ENG SERVICES  
ON ASSIGNED OPERATIONAL AIRBORNE WEAPONS AND TARGET SYSTEMS&PROVIDE  
ENGINEERING MANAGEMENT AND SUPPORT FOR FW EQUIPMENT DURING DEV. AND  
DEPLOYMENT PERFORM DEV. T&E OF AIRBORNE AND-SURFACE TARGET SYSTEMS MAJOR  
FAC: TEST OPERATIONS FAC ROCKET ENGINE TEST FAC INTEGRATED SYSTEMS SIMULA  
TION FAC TARGETS FAC, PHOTOGRAPHICS FAC INFRARED LASER END OPTICS LAB

# INSTALLATION NAVAL ORDNANCE LABORATORY

WHITE OAK, MD.

C.O. CAPT ROBERT WILLIAMSON II TECH. DIR DR. G.K. HARTMANN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	78.696	86.471
TOTAL PROCUREMENT	12.859	11.147
TOTAL O&M	3.794	2.920
TOTAL OTHER	5.801	6.618
TOTAL ANNUAL LAB	101.150	107.156
TOTAL INHOUSE	62.010	62.567
TOTAL INHOUSE RDT&E	43.332	46.141
ANNUAL OPERATING COST	23.313	23.154

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PMDS	TOTAL PROF	NON- PROF
MILITARY	53	1	27	26
CIVILIAN	2847	137	1144	1703
TOTAL	2900	138	1171	1729

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
1059	388.021	178.085	636.274	1202.380	46.618	34.165

## ...MISSION

TO BE THE PRINCIPAL NAVY RDT&E CENTER FOR ORDNANCE TECHNOLOGY CONCEPTS AND SYSTEMS. CAPABILITIES FOR STRATEGIC SYSTEMS, NAVAL MINE SYSTEMS, MULTI MEDIA WEAPONS SYSTEMS, DIRECTED ENERGY SYSTEMS, FUZE DEVELOPMENT, INSHORE WARFARE ORDNANCE, SMALL CRAFT ARMAMENT, SWIMMER WEAPONS SYSTEMS, ORDNANCE TECHNOLOGY

## ...CURRENT IMPORTANT PROGRAMS

TORPEDO MK48-1  
CAPTOR DEVELOPMENT  
HIGH ENERGY LASER RESEARCH AND DEVELOPMENT  
NUCLEAR WEAPON EFFECTS RESEARCH INCLUDING VULNERABILITY AND HARDENING  
REENTRY VEHICLES MATERIALS

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

WIND TUNNELS TO MACH 20& BALLISTICS RANGES FOR FREE FLIGHT MODEL STUDIES& HYDROBALLISTIC TANK 1.75 MILLION GALLON CAPACITY FOR STUDY OF RELATIVELY LARGE MODELS AT HIGH SPEED ENTRY&CENTRIFUGE TO STUDY U/W EXPLOSIONS& FACILITIES FOR TESTING AND RESEARCH IN THE CHEMISTRY OF EXPLOSIVES AND PROPELLANTS& EXTENSIVE LABORATORY AND FIELD FACILITIES FOR TESTING ORDNANCE UNDER NATURAL AND/OR SIMULATED CONDITIONS  
MAGNETIC STRUCTURE FACILITY TO STUDY MAGNETIC CHARACTERISTICS OF SUBMARINES, SHIPS AND SATELLITES& HIGH -ARC FACILITY& CDC 6400 COMPUTER

INSTALLATION NAVAL ORDNANCE MISSILE TEST FACILITY

WHITE SANDS M.R., N.M

C.O. CAPT H.E. DAVIES, JR. CHIEF ENG. DR. W.W. BOHN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	1.206	0.854
TOTAL PROCUREMENT	0.780	0.110
TOTAL O&M	0.025	0.000
TOTAL OTHER	1.739	2.627
TOTAL ANNUAL LAB	3.750	3.591
TOTAL INHOUSE	3.452	3.248
TOTAL INHOUSE RDT&E	1.206	0.854
ANNUAL OPERATING COST	0.833	0.850

PERSONNEL	PERSONNEL DATA AUTHORIZED STRENGTH	(END OF FY 1972)			NON- PROF
		TOTAL PHDS	TOTAL PROF		
MILITARY	178	1	46	132	
CIVILIAN	83	1	5	78	
TOTAL	261	2	51	210	

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
112	84.310	30.540	238.950	353.800	6.670	3.487

...MISSION

SUPPORT THE NAVY GUIDED MISSILE AND ROCKET PROGRAM INCLUDING GROUND AND FLIGHT TESTING& PARTICIPATE IN THE OPERATION OF THE DEPT OF DEFENSE INTEGRATED MISSILE TEST RANGE AT WHITE SANDS

...CURRENT IMPORTANT PROGRAMS

STANDARD MISSILE 2 SLANT AEGIS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

FLIGHT TEST TALOS TERRIER TARTAR STANDARD SURFACE TO AIR GUIDED MISSILES  
FLIGHT TEST STANDARD ANTI RADIATION MISSILE AIR TO SURFACE  
LAUNCH AEROBEE 150 170 AND 350 SOUNDING ROCKETS FOR UPPER ATMOS STUDY  
CONDUCT NAVY AIR WEAPON (BOMB) TESTS  
CONDUCT FEASIBILITY TEST FOR LOW ALTITUDE SUPERSONIC TARGET  
CONDUCT TESTS OF ISSMC PROGRAM

# INSTALLATION NAVAL PERSONNEL R&D LABORATORY

WASHINGTON, D.C.

C.O. CAPT AL BLANKS TECH. DIR. E.M. RAMRAS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	2.284	3.227
TOTAL PROCUREMENT	0.320	0.320
TOTAL O&M	0.650	0.466
TOTAL OTHER	0.419	0.475
TOTAL ANNUAL LAB	3.673	4.488
TOTAL INHOUSE	3.600	4.372
TOTAL INHOUSE RDT&E	2.211	3.111
ANNUAL OPERATING COST	0.320	0.665

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	43	0	41	2
CIVILIAN	197	15	120	77
TOTAL	240	15	161	79

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
0	22.156	2.703	1.420	26.279	0.652	0.450

## ...MISSION

CONDUCT REARCH DEVELOPMENT TEST EVALUATION BEHAVIOR AND SOCIAL SCIENCES  
AND RELATED FIELDS DIRECTED TOWARD NEW AND IMPROVED PERSONNEL AND  
MANPOWER SYSTEMS TECHNIQUES AND OPERATIONS

## ...CURRENT IMPORTANT PROGRAMS

ENLISTED OCCUPATIONAL DATA BANK  
COMBAT SYSTEMS MAINTENANCE MANAGEMENT CONCEPTS  
MANPOWER PLANNING AND ALLOCATION TECHNOLOGY  
SHIP SIMULATION MODELING TECHNOLOGY FOR MAN MAN MACHINE TRADE OFFS  
IMPACT OF INCREASING PREFERENCE OPTIONS IN USMC

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

OCCUPATIONAL ANALYSIS CAREER STRUCTURES MAN MACHINE SYSTEMS MANPOWER  
REQUIREMENTS ORGANIZATIONAL EFFECTIVENESS RECRUITMENT PROCUREMENT  
MANPOWER PERSONNEL COSTS ATTITUDES MOTIVATION SIMULATION MODELING  
RCA 301 COMPUTER IBM 1050 TELEPROCESSING TERMINAL WITH REMOTE JOB  
ENTRY CABILITY TO A IBM 360/91 AT APPLIED PHYSICS LABORATORY JOHN  
HOPKINS UNIVERSITY AND 360/67 AT NAVAL POST GRAD SCHOOL MONTEREY DATA  
100 DATA BATCH PROCESSING TERMINAL TO JOHN HOPKINS OPSCAN 100DC

# INSTALLATION NAVAL PERSONNEL RESEARCH ACTIVITY

SAN DIEGO, CA

C.O. CAPT F.L. NELSON TECH. DIR. DR. EARL I. JONES

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	3.340	4.010
TOTAL PROCUREMENT	0.000	0.080
TOTAL O&M	0.093	0.085
TOTAL OTHER	0.538	0.646
TOTAL ANNUAL LAB	3.971	4.821
TOTAL INHOUSE	3.971	4.263
TOTAL INHOUSE RDT&E	3.340	3.452
ANNUAL OPERATING COST	0.467	0.433

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	
MILITARY	34	0	34	0
CIVILIAN	165	35	98	67
TOTAL	199	35	132	67

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
1	47.300	4.900	0.000	52.200	0.210	0.289

## ...MISSION

PLANS AND CONDUCTS RESEARCH AND DEVELOPMENT IN PERSONNEL OPERATIONS AND BEHAVIORAL SCIENCES TO DEVELOP NEW CONCEPTS AND IMPROVED METHODS FOR ACQUIRING, CLASSIFYING, TRAINING, DISTRIBUTING, AND RETAINING PERSONNEL AND FOR MAXIMIZING THE UTILIZATION OF NAVY MANPOWER RESOURCES.

## ...CURRENT IMPORTANT PROGRAMS

INSTRUCTIONAL DESIGN AND EXPERIMENTAL TRAINING  
COMPUTERIZED MANPOWER MANAGEMENT RESEARCH  
PERSONNEL MEASUREMENT, CLASSIFICATION, ASSIGNMENT, AND RETENTION  
EDUCATIONAL TECHNOLOGY AND ADVANCED INSTRUCTIONAL SYSTEMS  
METHODOLOGY FOR DATA PROCESSING AND RESEARCH DESIGN

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

IBM 1130 DATA PROCESSING COMPUTER SYSTEM WITH REMOTE JOB ENTRY CAPABILITY TO A IBM 360/65 LOCATED AT THE NAVY ELECTRONICS LABORATORY CENTER  
OPTICAL SCANNER  
EXPERIMENTAL TESTING AND TRAINING FACILITIES  
PLATO STATIONS PLANNED FOR DECEMBER 1972



# INSTALLATION NAVAL RESEARCH LABORATORY

WASHINGTON, D.C.

DIR. CAPT EARLE W. SAPP DIR. OF RESEARCH DR. ALAN BERMAN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	120.057	131.169
TOTAL PROCUREMENT	16.912	14.528
TOTAL O&M	6.544	3.557
TOTAL OTHER	2.165	2.285
TOTAL ANNUAL LAB	145.678	151.539
TOTAL INHOUSE	140.048	149.499
TOTAL INHOUSE RDT&E	114.427	129.129
ANNUAL OPERATING COST	28.897	30.520

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	114	3	9	105
CIVILIAN	3986	519	1476	2510
TOTAL	4100	522	1485	2615

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL REAL PROP	EQUIP
2161	2241.527	135.662	664.139	3041.328	77.247	59.343

...MISSION  
TO CONDUCT SCIENTIFIC RESEARCH AND DEVELOPMENT IN THE PHYSICAL SCIENCES  
AND RELATED FIELDS DIRECTED TOWARD NEW AND IMPROVED MATERIALS,  
EQUIPMENT, TECHNIQUES, AND SYSTEMS FOR THE NAVY

...CURRENT IMPORTANT PROGRAMS  
FLEET SATELLITE COMMUNICATIONS  
COMMUNICATIONS SECURITY  
HIGH ENERGY LASER GENERATION, PROPAGATION, AND LASER EFFECTS PROGRAM  
SATELLITE PROGRAMS  
ADVANCED ACOUSTIC ANTI-SUMARINE WARFARE SURVEILLANCE PROGRAM

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
PRINCIPAL RESEARCH AND DEVELOPMENT LABORATORY OF THE NAVY. PRIMARY AREAS  
ARE MATERIALS SCIENCE AND TECHNOLOGY, SPACE SCIENCE AND TECHNOLOGY,  
RADAR, ELECTRONIC WARFARE, LASER TECHNOLOGY, OPTICS, OPTICAL WARFARE,  
ELECTRONIC DEVICES, PLASMA AND NUCLEAR PHYSICS, INTELLIGENCE SUPPORT,  
UNDERSEA SURVEILLANCE, OCEAN SCIENCE AND TECHNOLOGY. MAJOR FACILITIES  
INCLUDE TWO SHIPS FOR ACOUSTIC ASW RESEARCH, OCEANOGRAPHY, AND DEEP  
OCEAN SEARCH. MAJOR ACOUSTIC STANDARD AND CALIBRATION FACILITIES. HIGH  
LEVEL RADIATION LABORATORY. THREE NUCLEAR PARTICLE ACCELERATORS. DIVERS  
HIGH ENERGY LASERS. 200 KILOGAUSS HIGH FIELD MAGNET FACILITY. SPACE  
SIMULATION FACILITIES

# INSTALLATION NAVAL SHIP R&D LABORATORY

PANAMA CITY, FL.

C.O. CAPT L.O.G. WHALEY TECH. DIR. GERALD G. GOULD

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972	1973
	(ACTUAL)	(ACT + EST)
TOTAL RDT&E	7.380	9.729
TOTAL PROCUREMENT	0.286	0.866
TOTAL O&M	2.269	2.440
TOTAL OTHER	4.635	3.386
TOTAL ANNUAL LAB	14.570	16.421
TOTAL INHOUSE	13.342	15.152
TOTAL INHOUSE RDT&E	6.301	8.612
ANNUAL OPERATING COST	4.769	5.296

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL	NON-PROF
	AUTHORIZED STRENGTH	PHDS		
MILITARY	138	2	15	123
CIVILIAN	587	17	240	347
TOTAL	725	19	255	470

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN		REAL PROP	EQUIP
674	172.445	35.296	329.707	537.448	14.962	11.013

## ...MISSION

TO BE THE PRINCIPAL NAVY RDT&E CENTER FOR THE APPLICATION OF SCIENCE AND TECHNOLOGY ASSOCIATED WITH MILITARY OPERATIONS CARRIED OUT PRIMARILY IN THE COASTAL REGION, AND TO PERFORM INVESTIGATIONS IN RELATED FIELDS OF SCIENCE AND TECHNOLOGY.

## ...CURRENT IMPORTANT PROGRAMS

COASTAL TECHNOLOGY SUPPORTING MARINE CORPS, AMPHIBIOUS MINE COUNTER MEASURES & INSHORE WARFARE OPERATIONS. DETECTION AND CLASSIFICATION OF UNDERWATER OBJECTS. THEORY AND TACTICAL DOCTRINE FOR MINE COUNTER MEASURES. INTEGRATED SWIMMER DIVER SYSTEMS INCLUDING SALVAGE ACOUSTIC WARFARE SYSTEMS FOR SURFACE SHIPS AND SUBMARINES.

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

PLAN & CONDUCT RDT&E & PROVIDE SUPPORT TO OPERATING FORCES, NAVAL & GOV. AGENCIES IN SURFACE, SUBSURF & AIRBORNE MINE DEFENSE&ACOUSTIC & TORPEDO COUNTERMEASURES&INSHORE WARFARE& & RELATED SC & ENG. COMPUTERS& \$3.5M CM EVALUATOR, SDS 9300 DIGITAL & 2 ADI 256 ANALOGS& \$M 85500. 2 GULF RESEARCH PLATFORMS& \$5M IN 100' & 60' WATER WITH LIVING/LABS FOR 30 & 4 PEOPLE. \$220K OPTICAL TRACKING SYS. \$300K MODEL TOW BASIN. \$150K ELECTR TRACK RANGE. UNDERWATER ACOUSTICS FAC& \$200K TRACK RANGE, \$210K ANALOG DATA ANAL, \$500K TRANSDUCER DEV & EVAL, \$200K TRANSDUCER TEST POOL, \$425K SIM & SIGNATURE GENERATOR, \$50K TEST PLATFORM, MAGNETICS FAC : \$350K SIM, \$53K HELMHOLTZ COIL, \$110K SWEEP SIM, \$330K TARGET DETECT CLASS RANGE. \$110K PRES SIGNATURE SIM. \$89K WET SUBMERSIBLE. \$10M MAN-RATED OCEAN SIM FAC NEARING COMPLETION.

INSTALLATION NAVAL SHIP RESEARCH AND DEVELOPMENT CENTER WASHINGTON, D.C.

C.O. CAPT P.W. NELSON TECH. DIR. DR. A. POWELL

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	78.889	115.796
TOTAL PROCUREMENT	0.619	0.475
TOTAL OEM	12.090	8.231
TOTAL OTHER	12.098	9.248
TOTAL ANNUAL LAB	103.696	133.750
TOTAL INHOUSE	39.204	40.354
TOTAL INHOUSE RDT&E	28.455	32.367
ANNUAL OPERATING COST	23.572	22.655

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	50	2	24	26	
CIVILIAN	3072	101	1232	1840	
TOTAL	3122	103	1256	1866	

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL REAL PROP	EQUIP
325	318.012	182.073	1957.680	2457.765	64.767	43.015

...MISSION

TO BE THE PRINCIPAL NAVY RDT&E CENTER FOR NAVAL VEHICLES AND TO PROVIDE RDT&E SUPPORT TO THE U.S. MARITIME ADMINISTRATION AND THE MARITIME INDUSTRY.

...CURRENT IMPORTANT PROGRAMS

TOWED COMMUNICATIONS FOR SUBMARINES.

PROJECT SURPASS.

INTEGRATED AIRCRAFT/WEAPON AERODYNAMICS (CONFORMAL CARRIAGE).

NAVY ENVIRONMENTAL PROTECTION PROGRAM.

COMPUTER-AIDED SHIP DESIGN AND CONSTRUCTION (CASDAC).

...FUNCTIONS/EQUIPMENT/CAPABILITIES

PLAN AND CONDUCT RDT&E AND PROVIDE SUPPORT TO THE OPERATING FORCES AND NAVAL AND GOVERNMENT AGENCIES AS ASSIGNED IN THE AREAS OF HYDROMECHANICS, STRUCTURAL MECHANICS, ACOUSTICS & VIBRATIONS, AERODYNAMICS, APPLIED MATHEMATICS, SHIPS ATMOSPHERE CONDITIONING AND POLLUTION CONTROL, SHIP ELECTRICAL SYSTEMS, AND SHIPBOARD MACHINERY SYSTEMS. FACILITIES INCLUDE: BALLAST BLOW FACILITY& MAIN SEAWATER PIPING SYSTEM FACILITY& COMPUTER FACILITIES& HIGH SPEED, DEEP AND SHALLOW WATER, MANEUVERING-SEAKEEPING, AND ROTATING ARM TOWLING BASINS& SUBSONIC, TRANSONIC, SUPERSONIC, AND HYPERSONIC WIND TUNNELS& ACOUSTIC DATA ANALYSIS CENTER& ANECHOIC FLOW FACILITY&DEEP SUBMERGENCE PRESSURE TEST TANK& MAGNETIC FIELDS FACILITY & WELDING ANALYSIS FACILITY& AND STRUCTURAL RESEARCH FACILITY.

# INSTALLATION NAVAL SPACE SYSTEMS ACTIVITY

LOS ANGELES, CA.

C.O. CAPT D.G. FAULKNER, JR. TECH. ADV. DR. E.E. MUEHLNER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	9.784	7.564
TOTAL PROCUREMENT	10.726	15.953
TOTAL O&M	0.299	0.000
TOTAL OTHER	1.525	2.936
TOTAL ANNUAL LAB	22.334	26.453
TOTAL INHOUSE	0.881	1.081
TOTAL INHOUSE RDT&E	0.631	0.776
ANNUAL OPERATING COST	0.000	0.000

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	24	1	12	12
CIVILIAN	35	1	19	16
TOTAL	59	2	31	28

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN		OTHER	REAL PROP
0	0.000	1.595	3.233	4.828	0.000	0.022

## ...MISSION

PROV ENG COMPET & MGMT FOR DEVELP ASSGND SPA SYS&RESPONSIVE RQMTS OTHER  
USN ACTS&PROV GUIDANCE NAVAIRSYS COM ON SCOPE & CONTENT ADV STUDY RESRCH  
& ESPLOR PROGS&PERFORM NAVY MGMT & ENG FUNCTIONS RELATED JT SVC SPA SYS  
DEVELP&COORD WITH AFSAMSON ON TECH & ENG ASPECTS OF SPA DEVELP & PROGS

## ...CURRENT IMPORTANT PROGRAMS

ADVANCED SPACE SYSTEM  
PROJECT SROE  
FLEET SATELLITE COMMUNICATIONS  
SPACE TEST PROGRAM

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

INITIATE PLAN AND EXECUTE SPACE PROJECTS AS ASSIGNED  
PRODUCE TECH,COST & EFFECT STUDIES & ASSOC ENG MGMT & FINANCIAL PLANS  
RESPONS FOR MISSION AREAS IN WHICH USN PARTICIPATES AS MBR JT SVC EFFORT  
COORD ASSOC USN SPT EFFORT TO DOD & NASA SPACE RELATED PROGRAMS  
FOCAL POINT FOR NAVY SPACE EXPERIMENTS  
SINGLE POINT OF CONTACT WITH USAF SAMSO FOR ALL SPACE MATTERS  
COORD SPT PROVIDED OTHER USN ACTIVITIES TO AREAS NSSA RESPONSIBLE  
SUCH OTHER RESPNS AS ASSGND BY COMPETENT AUTHORITY

# INSTALLATION NAVAL SUBMARINE MEDICAL RESEARCH LABORATORY NEW LONDON, CT.

C.O. CAPT J.H. BAKER SCIENTIFIC DIR. DR. C.F. GELL

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	1.446	1.461
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.504	0.465
TOTAL ANNUAL LAB	1.950	1.926
TOTAL INHOUSE	1.950	1.926
TOTAL INHOUSE RDT&E	1.446	1.461
ANNUAL OPERATING COST	0.042	0.046

PERSONNEL	PERSONNEL DATA (END OF FY 1972)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	42	7	16		26
CIVILIAN	67	14	37		30
TOTAL	109	21	53		56

ACRES	SPACE AND PROPERTY				COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)						
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP	
0	23.325	6.441	12.638	42.404	0.000	0.885	

## ...MISSION

TO CONDUCT BASIC AND APPLIED RESEARCH IN SUBMARINE AND DIVING MEDICINE, CLOSED ENVIRONMENTS IN AREAS OF PHYSIOL. MEDICAL PSYCHOL. VISION AUDITION HUMAN FAC. ENG., DENTISTRY, MIL. APPLICATIONS, TO MEET NAVY REQ., AND FURNISH RES. AND MEDICAL ASSISTANCE TO SUB AND DIVING SHORE AND FLEET ACTIVITIES.

## ...CURRENT IMPORTANT PROGRAMS

1. EFFECTS OF ENVIRONMENTAL STRESS ON SUBMARINE PERS. A PROGRAM OF HABITABILITY STUDIES IN THE LAB AND AT SEA: 2. ESTABLISHMENT OF PHYSIOLOGICAL LIMITS OF SATURATION-EXCURSION DIVING: 3. LONGITUDINAL HEALTH STUDY OF SUB AND DIVING PERS.: 4. ORAL HEALTH EFFECTS OF SUB ENVIRONMENT AND PREVENTIVE CARE: 5. SELECTION AND RETENTION OF SUBMARINE AND DIVING PERSONNEL.

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

HYPERBARIC CHAMBERS, HUMAN-150PSI, ANIMAL, 300 PSI, 1000PSI & ENVIR. CONTR'L CHAMBERS & UNDERWATER VISION TEST POOL & ANECHOIC SUITE & MOBILE BIO-ACOUSTIC VAN & ANIMAL CARE-HOUSING FAC. & GROUP ORAL HLTH. RES. FAC. & DENTAL OPERATORY & MICROBIOLOGICAL ISOLATION FAC. & APPARATUS-MODEL SHOP & TECH. LIB. & DATA PROC. & GRAPHIC ARTS-PHOTO LAB. PUB. DUP. FAC. & RADIOISOTOPE HANDLING-STORAGE FAC. & DATA CONC-LOGGING SYST. & DIGITAL COMPTR. & ANALOG COMPTR. & HI-PRESS. REACTION VESSEL & BIOTELEMETRY SYST. & MASS SPECS. & ATOMIC ABSORP. SPTMTR. & GAS CHROMATOGRAPH & BODY PLETHYSMOGRAPH & TREADMILL & PORT. X-RAY SYST. & TECHNICON AUTOANAL. SURGICAL SUITE & MISTO-PATHOL. LAB & BIOCHEM LABS & BIOENG. LAB & PUL. FUNC. EXERCISE LAB & CARDIOPUL.-BLOOD ANAL. LAB & COMP. AUTOMATED HU. FAC. ENG LABS. MULTI-CHANNEL MAG-TAPE SYST & CLSD CIRCUIT TV SHSY & REFRIG. HI SPEED CENTRIFUGE & NITROGEN FREEZE UNIT & FLUIDIC CONTR. CONSOL & AIR ION MONITORING SYST.

# INSTALLATION NAVAL UNDERSEA R&D CENTER

SAN DIEGO, CA.

C.O. CAPT R.H. GAUTIER TECH. DIR. DR. WM. B. MCLEAN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	48.893	52.500
TOTAL PROCUREMENT	10.307	15.419
TOTAL O&M	11.554	10.642
TOTAL OTHER	7.842	5.522
TOTAL ANNUAL LAB	78.596	84.083
TOTAL INHOUSE	46.724	49.302
TOTAL INHOUSE RDT&E	31.374	33.620
ANNUAL OPERATING COST	18.819	18.624

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	284	0	35	249
CIVILIAN	1691	91	683	1008
TOTAL	1975	91	718	1257

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL REAL PROP	EQUIP
37575	336.900	33.457	671.100	1041.457	38.846	44.345

## ...MISSION

MISSION OF THE CENTER IS TO BE THE PRINCIPAL NAVY RESEARCH, DEVELOPMENT, TEST AND EVALUATION CENTER FOR UNDERSEA SURVEILLANCE, OCEAN TECHNOLOGY AND ADVANCED UNDERSEA WEAPONS SYSTEMS.

## ...CURRENT IMPORTANT PROGRAMS

ADV U/S SURVEILLANCE INCL LG APERTURE & TOWED ARRAYS. ADV SONAR TECHNIQS & FLEET SONAR SYS IMPROVMT. ASW WEAPONS SYS DEV, EG ADV TORPEDO TECHNOL SUB-LAUNCHED MISSILE TECHNOL. FIRE CONTROL SYS & ACOUSTIC C/M OCEAN SCI. INCL MARINE BIOSYS. ACOUSTIC PROPAGATN & USW RELATED OCEANOGR RSCH. OCEAN ENGRG INCL DEEP SUBMERG RECOVERY & WORK SYS.

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

UNDERSEA SURVL. UNDERSEA/SURFACE WEAPONS & FIRE CONTROL SYS LTWT TORPE-DOES, HIGH SPEED VEHICLE & HIGH RESOLUTION SONARS, UW ACOUSTIC WARFARE SYS, REMOTE CONTROL UW SYS, OCEAN TECHNOL & ENGRG, MARINE BIOSCI, MAR MAMMAL SYS, ACOUSTIC PROPAGATION (PAC/ARC), PACFLT ASW SUPPT, ARCTIC SUBMARINE SYS. RDT&E LABS SDIEGO, PASADENA, HAWAII, MAR BIOSCI FACS SEA TEST/ENGRG RANGES SAN CLEMENTE IS, MORRIS DAM, LBEACH & CALIBRATION STAG ARCTIC FIELD STA, ALASKA & ARCTIC SUB LAB & POLAR ICE SIMULATORS & TRANS-DUCER EVAL CTR ANECHOIC ALL FREQS & ASW COMPUTER SIM CTR & RSCH SHIPS & CRAFT INCL USNS SP LEE TAG 192 & DATA ACQ, PLAYBACK & ANAL FAC FOR DEV/ EVAL OF SIGNAL PROC TECHNIQS & RESCUE SYS TEST FAC & DEV/TEST FACS FOR LTWT AIROP TORPEDES & CABLE CONTROL UW RECOVERY VEHICLE & PANORAMIC VIEW SUBMERSIBLES & VARIABLE ANGLE LAUNCHER.

# INSTALLATION NAVAL UNDERWATER SYSTEMS CENTER

NEWPORT, R.I.

C.O. CAPT MILTON C. MCFARLAND TECH. DIR. HAROLD E. NASH

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	49.143	62.865
TOTAL PROCUREMENT	36.802	34.984
TOTAL O&M	20.033	25.898
TOTAL OTHER	10.443	7.653
TOTAL ANNUAL LAB	113.421	131.400
TOTAL INHOUSE	85.440	101.645
TOTAL INHOUSE RDT&E	39.445	46.995
ANNUAL OPERATING COST	17.829	18.115

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	93	0	23	70
CIVILIAN	3140	73	1359	1781
TOTAL	3233	73	1382	1851

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
835	625.928	121.655	795.281	1542.864	28.598	32.915

...MISSION  
TO BE THE PRINCIPAL NAVY RDT&E CENTER FOR UNDERWATER WEAPONS SYSTEMS

...CURRENT IMPORTANT PROGRAMS  
DEVELOPMENT OF UNDERWATER ACOUSTIC THEORY MODELS & SIMULATION TECHNIQUES  
DESIGN DEVELOPMENT AND EVALUATION OF UNDERWATER WEAPON AND TARGET SYSTEM  
MAINTAIN PRIMARY R&D CAPABILITY FOR SONAR SYSTEMS HULL MOUNTED AND TOWED  
DESIGN/PERFORM UNDERWATER RANGING EXPERIMENTS AND EVALUATION OF DATA  
R&D CAPABILITY FOR READINESS OF IN-SERVICE SHIPBOARD UNDERWATER SYSTEMS

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
TO PROVIDE RDT&E SUPPORT TO NAVSHIPS/NAVELEX/NAVORD/NAVAIR/NAVOCEANO.  
MAJOR EQUIPMENT AND FACILITIES - TORPEDO TEST RANGE COMPLEX INCLUDING  
LOCATIONS AT NEWPORT R I ANDROS ISLAND BAHAMAS AND CAPE KENNEDY FLORIDA/  
ASW WEAPON FIRE CONTROL DEVELOPMENT AND EVALUATION FACILITY/ACOUSTIC  
MEASUREMENT AND TRANSDUCER RESEARCH AND EVALUATION FACILITIES/INSTRUMENT  
CALIBRATION LABORATORY/ASW WEAPON LAUNCHING DEVICE DEVELOPMENT AND  
EVALUATION FACILITY/WEAPONS SYSTEMS SIMULATION LABORATORY/OCEANOGRAPHIC  
LABORATORY FACILITY/LABORATORY RESEARCH AND TECHNICAL SUPPORT SHOP  
FACILITIES/RESEARCH SUPPORT VESSELS FACILITY/INSTRUMENTATION DESIGN AND  
RECORDING TECHNIQUES FACILITY/TORPEDO PROPULSION TEST FACILITY/DIGITAL  
COMPUTER AND DATA ANALYSIS RESEARCH FACILITIES TO EVALUATE EXISTING AND  
PROPOSED WEAPONS SYSTEMS AND TO CONDUCT DATA REDUCTION AND ANALYSIS.

INSTALLATION NAVAL UNIT, FORT DETRICK

FREDERICK, MD.

C.O. CAPT G.W. WERNER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	0.025	0.162
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.092	0.178
TOTAL ANNUAL LAB	0.117	0.340
TOTAL INHOUSE	0.117	0.340
TOTAL INHOUSE RDT&E	0.025	0.162
ANNUAL OPERATING COST	0.019	0.040

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	16	2	6	10
CIVILIAN	1	0	0	1
TOTAL	17	2	6	11

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
0	0.000	2.121	0.000	2.121	0.000	0.010

...MISSION

DEVELOPMENT OF MATERIALS AND METHODS COMPATIBLE WITH NAVY REQUIREMENTS  
FOR THE PREVENTION AND CONTROL OF DISEASES OF NATURAL AND UNNATURAL  
ORIGIN  
VIRAL AND BACTERIAL SEROLOGY VIRAL AND TISSUE CULTURE AND AEROBIOLOGY

...CURRENT IMPORTANT PROGRAMS

DEVELOPMENT OF NEW EXPERIMENTAL VACCINES  
ENVIRONMENTAL PREVENTION AND CONTROL OF AIRBORNE DISEASES  
CLEANSING OF HOSPITAL EQUIP AND SPACES WITH GASEOUS DISINFECTANTS  
PROMOTE MODERN MED SCIENTIFIC RESEARCH JOINTLY WITH DEPT OF THE ARMY  
AND EVALUATE BIOLOGICAL WARFARE MEDICAL DEFENSIVE MEASURES

...FUNCTIONS/EQUIPMENT/CAPABILITIES

DRUG SYNTHESIS FOR ANTICHOLINESTERASE  
NONIONIZING RADIATION EFFECTS SAFETY MONITORING  
RAPID IDENTIFICATION TECHNIQUES OF VIRUSES



INSTALLATION NAVAL WEAPONS CENTER

CHINA LAKE, CA.

C.O. RADM H. SUERSTEDT, JR. TECH. DIR. H.G. WILSON

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	105.453	99.757
TOTAL PROCUREMENT	35.031	33.015
TOTAL O&M	6.062	5.610
TOTAL OTHER	25.545	24.722
TOTAL ANNUAL LAB	172.091	163.104
TOTAL INHOUSE	108.975	105.210
TOTAL INHOUSE RDT&E	68.527	66.842
ANNUAL OPERATING COST	40.325	42.432

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	716	0	45	671
CIVILIAN	4592	104	1453	3139
TOTAL	5308	104	1498	3810

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
1093019	722.689	163.857	5752.845	6639.391	229.339	83.925

...MISSION

THE MISSION OF THE NAVAL WEAPONS CENTER IS TO BE THE PRINCIPAL NAVY RDT AND E CENTER FOR AIR WARFARE AND MISSILE WEAPON SYSTEMS. THE FUNCTIONS ARE TO ESTABLISH AND MAINTAIN THE PRIMARY IN-HOUSE RESEARCH AND DEVELOPMENT CAPABILITY FOR NAVY AND MARINE CORPS SYSTEMS.

...CURRENT IMPORTANT PROGRAMS

AGILE - ADVANCED SHORT RANGE AIR-TO-AIR MISSILE SYSTEM.  
HARM - HIGH SPEED ANTI-RADIATION MISSILE.  
FAE - FUEL AIR EXPLOSIVE.  
CONDOR - AIR-TO-SURFACE MISSILE SYSTEM WITH STAND-OFF CAPABILITY.  
AIM9L - GUIDED, AIR-LAUNCHED INTERCEPTOR MISSILE.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

SUBSYSTEMS AND TECHNOLOGIES IN SUCH AREAS AS: STRIKE AIRCRAFT/WEAPON SYSTEMS AND CONCEPT DEVELOPMENT & AVIONICS SYSTEMS& TACTICAL MISSILES (ANTI-SHIP CRUISE MISSILES AND POINT DEFENSE MISSILES)& PROPULSION, GUIDANCE AND CONTROL, WARHEAD, FUZE, AND LAUNCHER AND HANDLING EQUIPMENT SUBSYSTEMS FOR THE AFOREMENTIONED SYSTEMS: STRIKE WARFARE COUNTERMEASURES& AND WEATHER MODIFICATION. FACILITIES INCLUDE: MICHELSON LABORATORY& ELECTRONIC WARFARE RANGES& SOLID STATE DEVICES LABORATORY& FUZE TEST RANGES& PROPULSION RESEARCH LABORATORIES& MICROELECTRONICS FACILITY& EXPLOSIVES RESEARCH AND DEVELOPMENT FACILITY& GROUND AND AIRCRAFT RANGES& EXTERIOR AND TERMINAL BALLISTICS RANGES& NAVAL AIR FACILITY& AIRCRAFT SURVIVABILITY FACILITY SUPERSONIC TEST TRACKS& MICROWAVE ANECHOIC FACILITIES.

# INSTALLATION NAVAL WEAPONS EVALUATION FACILITY

ALBUQUERQUE, N.M.

C.O. CAPT R.H. STOLPE TECH. DIR. F.X. BUSHNER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	1.170	1.151
TOTAL PROCUREMENT	0.752	0.654
TOTAL O&M	0.927	0.797
TOTAL OTHER	2.439	2.473
TOTAL ANNUAL LAB	5.288	5.075
TOTAL INHOUSE	5.236	5.045
TOTAL INHOUSE RDT&E	1.118	1.121
ANNUAL OPERATING COST	0.599	0.701

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	200	0	200	0
CIVILIAN	94	1	39	55
TOTAL	294	1	239	55

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
5	19.590	21.522	101.958	143.070	8.500	0.450

## ...MISSION

TEST-EVALUATE-SUPPORT NUCLEAR/DESIGNATED NON-NUC WPNS/WPN SYSTEMS. ADVIS CNO IN PROMOTING-MONITORING NUC WPN SAFETY. PLAN-CONDUCT N&C WPN SYSTEM SAFETY STUDIES/RVWS.ASSIST BD OF INSP/SURVEY IN EVAL OF NUC WPN/AIRCRAFT /SHIPS. PROVIDE A/C CHECKLISTS/LDG MAN FOR NUC/DESIGNATED NON-NUC WPNS.

## ...CURRENT IMPORTANT PROGRAMS

PREPARING CHECKLISTS/LDG MANUALS FOR F-14 A/C AND HARRIER WPN SYSTEM. CONDUCTING EVAL OF A7E COMPUTER DELIVERY OF NUC WPNS. CONDUCTING FAULT TREE SAFETY ANALYSIS OF MK48 TORPEDO. EVALUATING NUC SAFETY OF ASROC WPN SYSTEM ON DD963 CLASS SHIPS. PARTICIPATING IN EARLY DEVELOPMENT OF XM517 AND XM673 NUC PROJECTILES, SM-2 AAW MISSILE, AND MK400 AN MK500 FBMS.

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

CONDUCT OF NAVY NUC WPNS:EVALUATION,TEST,VULNERABILITY,COMPATIBILITY AND SAFETY PROGRAMS&SAFETY STUDIES AND RVWS&FEASIBILITY STUDIES FOR FUTURE SYSTEMS&SAFETY SURVEYS AND SYMPOSIA. PREPARATION OF NUC WPN:A/C CHECK LISTS AND LDG MANUALS,MILITARY CHARACTERISTICS AND STOCKPILE-TO-TARGET SEQUENCES,SAFETY ANALYSES,MECH-ELECT INTERFACE DWGS,EMERGENCY DESTRUCT PROCEDURES,NUC SAFETY PERIODICAL. PARTICIPATION IN NUC WPN:BD OF INSP AND SURVEY TRIALS OF A/C AND SHIPS,EFFECTS TESTS,PROTECTIVE EQUIPMENT PROGRAM,DEV OF A/C BDUS AND SUSPENSION-RELEASE-AMAC EQUIP,PHASE I AND II STUDIES. PROVIDE:FLIGHT SERVICE TO THE AEC,SUPPORT TO THE NLO-JAWPS, ENGINEERING-TECHNICAL-FIELD TO SYSTEM COMMANDS/PROTECT OFFICES,A/C AND HDLG EQUIPMENT MAINTENANCE,NUC WPN LIAISON TO AEC-DNA-CONTRACTORS-FLEETS-FIELD ACTIVITIES.

# INSTALLATION NAVAL WEAPONS LABORATORY

DAHLGREN, VA.

C.O. CAPT ROBERT F. SCHNIEDWIND TECH. DIR. BERNARD SMITH

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	29.369	45.486
TOTAL PROCUREMENT	24.229	16.287
TOTAL O&M	11.369	11.358
TOTAL OTHER	18.358	13.237
TOTAL ANNUAL LAB	83.325	86.368
TOTAL INHOUSE	56.550	63.290
TOTAL INHOUSE RDT&E	19.469	36.826
ANNUAL OPERATING COST	12.285	13.135

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	108	0	27	81
CIVILIAN	2703	67	1029	1674
TOTAL	2811	67	1056	1755

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL REAL PROP	EQUIP
4490	484.567	73.655	808.830	1367.052	63.573	31.101

## ...MISSION

CONDUCTS A PROGRAM OF WARFARE ANALYSIS, RESEARCH, DEVELOPMENT, TEST, EVALUATION, SYSTEMS INTEGRATION, AND FLEET ENGINEERING SUPPORT IN NAVAL WEAPONS SYS, PRINCIPALLY FOR SURFACE WARFARE, AND CONDUCTS SUPPORTIVE PROGRAMS IN OTHER WARFARE AND FIELDS OF TECHNOLOGY.

## ...CURRENT IMPORTANT PROGRAMS

EXTENDED RANGE GUIDED PROJECTILE AND AMMUNITION PROGRAMS  
NAVAL TACTICAL RECONNAISSANCE AND SURVEILLANCE PROGRAMS  
GUIDANCE DATA FOR POLARIS/POSEIDON/ULMS/FBM SYSTEMS PROGRAMS  
SPECIAL EFFECTS WARHEADS  
DIGITAL FIRE CONTROL SOFTWARE/HARDWARE PROGRAMS

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

LAB CAPABILITIES SUPPORT WORK IN TACTICAL, STRATEGIC, AMPHIBIOUS AND MINE WARFARE ANALYSIS, SYSTEMS EFFECTIVENESS STUDIES, SATELLITE GEODESY& DIGITAL FIRE CONTROL SYSTEMS, COMPUTER SCIENCES, RDT&E IN WARFARE AND SURFACE LAUNCHED WEAPONS& ELECTROMAGNETIC WARFARE& MISSILE GUIDANCE& WEAPONS CONTROL&MATERIALS AND INSTRUMENTATION RESEARCH& WEAPONS SAFETY, MODEL FABRICATION&PRODUCT ENGINEERING& ELECTRONIC AND APPLIED PHYSICS& GEO, INTERIOR, EXTERIOR AND TERMINAL BALLISTICS& WARHEAD AND MUNITIONS R&D FACILITIES INCLUDE WARFARE ANALYSIS CENTER AND COMPUTATION FAC&FIRE CONTROL PROGRAM ASSURANCE FAC& FBM DISC PACK PRODUCTION FAC&EXPLOSIVE EFFECTS EVALUATION COMPLEX& CHEM/BIO DEFENSE LAB COMPLEX&SPECIAL EFFECTS TEST FAC&GUNNERY AND MISSILE RANGE COMPLEX& NAVAL GUN EVAL FAC& EMPASS SUPPORT FAC&ELECTROMAGNETIC VULNERABILITY TEST FACILITY.

INSTALLATION NAVY MEDICAL NEUROPSYCHIATRIC RESEARCH UNIT SAN DIEGO, CA

C.O. CAPT R.J. ARTHUR SCIENTIFIC DIR. DR. W. WILKINS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	0.975	1.460
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.517	0.295
TOTAL ANNUAL LAB	1.492	1.755
TOTAL INHOUSE	1.492	1.672
TOTAL INHOUSE RDT&E	0.975	1.377
ANNUAL OPERATING COST	0.190	0.170

PERSONNEL	PERSONNEL DATA (END OF FY 1972)				NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	19	11	14		5
CIVILIAN	58	9	26		32
TOTAL	77	20	40		37

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)				REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
0	13.977	4.500	0.000	18.477	0.000	0.317

...MISSION

CONDUCT NEUROPSYCHIATRY RESEARCH AS APPLIES TO NAVAL SERVICE  
DEVELOP STUDY PLAN ON REPATRIATED PRISONERS OF WAR

...CURRENT IMPORTANT PROGRAMS

LIFE STRESS & HEART DISEASE IN HEALTHY NAVY OFFICERS AND PETTY OFFICERS  
STRESS TOLERANCE DIFFERENCES AMONG NAVAL PERSONNEL  
DEVELOP COMPUTERIZED PSYCHIATRIC DATA-SYSTEM FOR NAVAL SERVICE  
GUIDELINES FOR PSYCHIATRIC TREATMENT AND DISPOSITION OF NAVAL PERSONNEL  
PHYSICAL FITNESS STANDARDS PREDICTING MILITARY EFFECTIVENESS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

ANALYSIS OF UNDERWATER PSYCHOPHYSIO PROGRAMS AND TASKS  
COMPLETE EEG COMBINED USE FOR SINGLE SEIZURE STUDY AND SLEEP DEPRIVATION  
ON-LINE SEG RECORDING CAPABILITIES

INSTALLATION NAVY TOXICOLOGY UNIT, NNMC

BETHESDA, MD.

C.O. LCDR L.J. JENKINS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	0.234	0.548
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.151	0.158
TOTAL ANNUAL LAB	0.385	0.706
TOTAL INHOUSE	0.380	0.423
TOTAL INHOUSE RDT&E	0.229	0.265
ANNUAL OPERATING COST	0.012	0.015

PERSONNEL	PERSONNEL DATA (END OF FY 1972)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	17	3	8		9
CIVILIAN	7	0	2		5
TOTAL	24	3	10		14

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
0	2.260	0.140	1.416	3.816	0.187	0.508

...MISSION

CONDUCT RDT&E IN OPERATIONAL & ENVIRONMENTAL TOXICOLOGY. RESEARCH TOX RESPONSE TO ATMOSPHERIC CONTAMINANTS AT HIGH PRESSURE. CHARACTERIZE TOX POTENTIAL OF SURFACE SHIP & SUBMARINE CHEMICALS & MATERIALS. RESEARCH SYNERGISTIC EFFECTS OF THERMAL DEGRADATION PRODUCTS OF ORGANIC NITRATE

...CURRENT IMPORTANT PROGRAMS

CHRONIC INGESTION OF RDX IN MONKEYS DOGS AND RODENTS.  
TOXICOLOGY OF SULFOLANE A MATERIAL WITH POTENTIAL USE IN CO2 SCRUBBERS.  
BEHAVIORAL TOXICOLOGY OF SULFOLANE AND NOSET-A PROPELLANT.  
THRESHOLD TOXICITY OF MONOMETHYLHYDRAZINE.  
HYPERBARICTOXICITY OF HYPERBARIC BREATHING GAS MIXTURES.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

FUEL. EVALUATE ACUTE AND CHRONIC TOXICITY OF ENVIRONMENTAL CONTAMINANTS OF NAVAL ORIGIN BY EFFECTS ON HEMATOLOGIC BIOCHEMICAL ENZYMATIC AND PATHOLOGIC PARAMETERS. DETERMINE MODE AND SITE OF ACTION OF TOXIC MATERIALS. DEVELOP DATA ON ORAL OCULAR DERMAL AND INHALATION HAZARDS OF MILITARY CHEMICALS. DEVELOP EXPOSURE CRITERIA TO PROTECT HEALTH. RESEARCH TOX OF ATMOSPHERIC CONTAMINANTS AT PRESSURES TO 1000 PSIG. FACILITIES AND EQUIPMENT CAPABILITY CONSISTS OF 662 CV METER EXPOSURE CHAMBERS 150 & 1000 PSIG CHAMBERS WELL EQUIPPED CHEMISTRY BIOCHEMISTRY HEMATOLOGY PATHOLOGY PHARMACOLOGY & INSTRUMENTATION LABORATORIES. OVERALL CAPABILITY IN ENVIRONMENTAL TOXICOLOGY OF INHALED & INGESTED CONTAMINANTS OF NAVAL ORIGIN & DEVELOPMENT OF EXPOSURE CRITERIA.

# INSTALLATION PACIFIC MISSILE RANGE

POINT MUGU, CA.

C.O. RADM W.M. HARNISH TECH. DIR. W.L. MILLER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	65.355	67.723
TOTAL PROCUREMENT	1.496	4.969
TOTAL O&M	6.956	6.323
TOTAL OTHER	16.305	14.592
TOTAL ANNUAL LAB	90.112	93.607
TOTAL INHOUSE	58.156	59.233
TOTAL INHOUSE RDT&E	44.150	44.998
ANNUAL OPERATING COST	22.795	23.022

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	727	9	118	609
CIVILIAN	2909	5	384	2525
TOTAL	3636	14	502	3134

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN / OTHER		REAL PROP	EQUIP
29600	93.463	271.263	1395.996	1760.722	142.600	170.000

...MISSION  
TO PROVIDE SUPPORT FOR THE DEPARTMENT OF DEFENSE AND OTHER DESIGNATED GOVERNMENT AGENCIES FOR LAUNCHING, TRACKING, & COLLECTING DATA IN GUIDED MISSILE, SATELLITE, & SPACE VEHICLE RESEARCH, DEVELOPMENT, EVALUATION AND TRAINING PROGRAMS AND ACTUAL OPERATIONS

...CURRENT IMPORTANT PROGRAMS  
RANGE SUPPORT OF 280 NATIONAL RANGE USER PROGRAMS INCL F-14 AND HARPOON  
DEV OF UNDERWATER TEST AND EVAL RANGE IN HAWAIIAN AREA FOR ASW WEAPONS  
DEV EXTENDED AREA TRACKING SYSTEM (OVER-THE-HORIZON) IN CONUS AREA  
DEV OF INTEGRATED TARGET CONTROL SYSTEM (ITCS) FOR CONUS SITES  
DEV OF AIR COMBAT MANEUVERING TEST SYSTEM (ACMTS) FOR TACT WPN SYS EVAL

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
OPERATE NAT'L RANGE FACIL AT PT MUGU CAL/SAN NICOLAS IS/KAUAI HAW/MIDWAY IS/WAKE IS/JOHNSTON IS. OPERATE UNDERWATER RANGE, KAUAI. OPERATE RANGE INSTR SHIP USNS WHEELING (TAGM-8) AND 5 RANGE INSTR AIRCRAFT (EC-121K). PROVIDE TRAJECTORY DATA, TELEMETRY COMMAND CONTROL/DESTRUCT, COMM SVCS DATA RELAY AND DISPLAY FOR CONTROL DATA PROCESSING ITEM RECOVERY AT SEA, TECH SVCS (CALIB/REPAIR/INSTALL (MAINT)), METRO & OCEANO SVCS, FREQ PROTECTION, NAVIG AIDS LOGISTICS & BASE SUPPORT MAJOR OP CONTROL SITES AT CONUS & BARKING SANDS DATA PROC CENTER PT MUGU PROBE LAUNCH COMPLEX AT PT MUGU SAN NICOLAS IS, & KAUAI. UNDERWATER RANGE KAUAI IS 5 X 10 MI WITH 37 HYDROPHONES AT 400-1000 FATHOMS INSTRUMENTED AREAS: CONUS-100X 200 MI/HAW AREA - 50 X 100 MI/JOHNSTON - 100 MI RADIUS AREA FREQ COORD (JCS) AT CONUS AND HAW AREA. SPEC HYDROACOUSTIC ARRAY OAHU/MIDWAY/WAKE

# INSTALLATION AEROPROPULSION LABORATORY

WPAFB, OH.

C.O. COL W.S. MOE DEPUTY DIR. M.P. DUNNAM

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RD&E	60.830	70.500
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL Q&EP	0.000	0.000
TOTAL ANNUAL LAB	60.830	70.500
TOTAL INHOUSE	5.387	5.235
TOTAL INHOUSE RD&E	5.387	5.235
ANNUAL OPERATING COST	0.189	0.237

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	
MILITARY	51	4	47	4
CIVILIAN	341	10	182	159
TOTAL	392	14	229	163

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
40	309.500	66.500	274.775	650.775	12.894	16.713

## ...MISSION

PLAN, FORMULATE AND EXECUTE EXPLORATORY ADVANCED AND PROTOTYPE DEVELOPMENT PROGRAMS IN AIR-BREATHING PROPULSION, FLIGHT POWER, LASER AERODYNAMICS AND AIRCRAFT FUELS, LUBRICANTS AND FIRE PROTECTION. ENSURE THE RAPID APPLICATION OF RESEARCH AND TECHNOLOGY TO ADVANCED AEROSPACE SYSTEMS.

## ...CURRENT IMPORTANT PROGRAMS

YJ101 PROTOTYPE ENGINE FOR LIGHTWEIGHT FIGHTERS  
HIGH TEMPERATURE TURBINE, WITH VARIABLE GEOMETRY AND HIGH STAGE LOADING  
INTEGRAL ROCKET/RAMJET POWERED MULTI-PURPOSE MISSILE  
LASER AERODYNAMICS AND HIGH POWER FOR LASER SYSTEM  
FUELS AND PROTECTION TECHNIQUES TO ENHANCE AIRCRAFT SURVIVABILITY

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

TURBOSHAFT ENGINE ALT CELL-FUEL CONTROL SYNTHESIS-CENTRAL DATA SYSTEM  
ENERGY CONVERSION TRANSFER FAC-PROGRAMMABLE BATTERY TEST RACKS LUBRICANT RESEARCH FAC-GEAR RIGS-BEARING RIG-SEAL TEST RIGS, FUEL RESEARCH LAB-CORROSION TEST-AGING CHAMBERS-FUEL CHAMBER, ROTOR TEST FAC-UP TO 4000 HP P-95 FT MAX DIA UP TO 50000 LB THRUST TURBINE ENGINE TEST STANDS-10 SEA LEVEL STANDS TO 50000 LB THRUST, 2 TURBINE ENGINE ALTITUDE CELLS TO 3000 LB THRUST-50000 FT-MACH 1.5, PROPELLER WHIRL RIGS-4 RIGS TO 30000 HP GYROSCOPIC TEST CHAMBER, SPACE POWER VACUUM AND LIQUID METAL LOOP FAC-27 FT DIA BY 37 FT HIGH, HEAT TRANSFER RESEARCH FAC-HYDROGEN COOLED TURBINE ENGINE BLADES, ELECTRO AERODYNAMIC LASER FAC-VARIABLE POWER SUPPLY TO 300 KW AT 100-600 VDC, AIRCRAFT SOLID STATE ELECTRICAL POWER FAC-THREE 350 HP DRIVE STANDS-2 A7 AIRCRAFT ELECTRICAL SIMULATORS

# INSTALLATION AEROSPACE RESEARCH LABORATORIES

WPAFB, OH

C.O. COL W.J. HARE CHIEF SCIENTIST DR. HANS J.P. VON OHAIN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972	1973
	(ACTUAL)	(ACT + EST)
TOTAL RDT&E	12.754	12.454
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	1.060	1.062
TOTAL ANNUAL LAB	13.814	13.516
TOTAL INHOUSE	9.155	8.167
TOTAL INHOUSE RDT&E	8.095	7.105
ANNUAL OPERATING COST	1.504	1.334

PERSONNEL	PERSONNEL DATA (END OF FY 1972)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	72	22	56	16	
CIVILIAN	173	43	84	89	
TOTAL	245	65	140	105	

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
34	134.953	49.837	34.719	219.509	12.625	12.603

## ...MISSION

PLANS AND EXECUTES USAF RESEARCH PROGRAMS IN THE PHYSICAL AND ENGINEER SCIENCES. PROVIDES TECHNICAL OR MANAGEMENT ASSIST IN SUPPORT OF STUDIES, ANALYSES, RESCH AND DEVELOPMENT PLANNING ACTIVITIES, ACQUISITION, TEST, EVALUATION, AND OPERATION OF AEROSPACE SYSTEMS AND EQUIPMENT.

## ...CURRENT IMPORTANT PROGRAMS

INVESTIGATION OF FLUID DYNAMIC ENERGY AND MOMENTUM EXCHANGE PROCESSES. STUDY OF PROCESSES AT SOLID-GAS AND SOLID-SOLID INTERFACES. STUDY OF INFRARED TRANSMISSION AND CONVERSION PROCESSES IN II-VI MATERIALS. FUNDAMENT. RESCH ON NON-EQUILIBRIUM IONIZAT AND EXCITAT PROC IN PLASMAS. EXCITAT AND IONIZAT PROCESS., KINETICS OF CHEM REACTIONS PERT. TO LASERS

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

ARL CONDUCTS AND SPONSORS FUNDAMENTAL RESCH IN: STRUCTURE AND PROPERTIES OF SOLIDS& CHEMICAL PROPERTIES AND PROCESSES& HIGH VELOCITY FLUID MECHANICS& AEROSPACE SIMULATION TECHNIQUES& APPLIED MATH& PLASMA AND SOLID STATE PHYSICS AND ENERGY CONVERSION. SUPPORT FACILITIES INCL GLASS SHOP, MACHINE SHOP AND 15000 VOL TECHNICAL LIBRARY. EXPERIMENTAL FACILITIES INCL: TWO HIGH REYNOLDS NUMBER SUPERSJN. WIND TUNNELS& 4 HYPERSONIC WIND TUNNELS& AND A SUPERSOINIC COMBUSTION FACILITY& A 1 MEV VAN DE GRAAFF ACCELERATOR& EPR AND NMR SPECTROMETERS& A TANDEM ION-MOLECULE MASS SPECTROMETER& AND CAPABILITY FOR GROWTH OF THIN PLATELET TYPE II-VI CRYSTALS OF A VERY HIGH DEGREE OF PURITY AND SURFACE PERFECTION.



# INSTALLATION ARMAMENT DEVELOPMENT AND TEST CENTER

EGLIN AFB, FL.

C.O. MG J.C. MAXWELL CHIEF SCIENTIST T.H. DALEHITE

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	129.713	138.817
TOTAL PROCUREMENT	205.271	195.000
TOTAL O&M	2.632	2.615
TOTAL OTHER	46.639	58.413
TOTAL ANNUAL LAB	384.255	394.845
TOTAL INHOUSE	100.205	107.601
TOTAL INHOUSE RDT&E	57.006	58.988
ANNUAL OPERATING COST	20.000	20.000

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	4531	114	1269	3262
CIVILIAN	3707	35	678	3029
TOTAL	8238	149	1947	6291

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL REAL PROP	EQUIP
464795	676.611	944.744	6656.315	8277.670	210.261	223.159

## ...MISSION

EXPL ADV ENGR DEV AND TEST EVAL INITIAL ACQUISITION OF NONNUCLEAR MUNS CONDUCTS TESTS & EVALUATIONS IN FOLLOWING AREAS EMW AFWET COM/CONTROL INTRUSION/INTERDICTION, ELECTRO/OPTICAL, CLIMATIC SIMULATION, VERTICAL PROBES. PERFORMS COMBAT TECH APPL. SUPPORYS TESTS OF OTHER AGENCIES.

## ...CURRENT IMPORTANT PROGRAMS

DEFENSE SUPPRESSION  
SEEK BAT  
MODULAR WEAPON SYS EMS  
CLOSE AIR SUPPORT  
ADVANCED AERIAL TARGETS - HAST AND PQM-102

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

A CAPABILITY OF SCIENTIFIC/ENGINEERING PERSONNEL AND LABORATORIES FOR EXPL ADV & ENGR DEV IN THE AREA OF NONNUCLEAR MUNITIONS. ARMAMENT SYS TEST ENVIRONMENT COVERING 728 SQ MI WITH LARGE ADJACENT WATER AREA. HAS 28 TEST AREAS WITH INSTRUMENTED FACILITIES INCLUDING PRECISION TRACKING RADARS AND PHOTO-OPTICS. IS USED FOR MUNITIONS TESTS AND ELECTROMAGNETIC TEST ENVIRONMENT, IS AN INSTRUMENTED COMPLEX OF THREAT SYSTEMS FOR EVALUATION OF EMW DEVICES AND TECHNIQUES. WEAPONS EFFECTIVENESS AND SYS TEST ENVIRONMENT PROVIDES A REALISTIC ENVIRONMENT FOR TESTING A WPNS SYS AGAINST AN ACTIVE DEFENSE SYSTEM. A CLIMATIC LAB CAPABLE OF TESTING COMPLETE WPNS SYSTEMS. A PROBE LAUNCH FACILITY FOR LAUNCHING SCIENTIFIC PROBES. A COMPUTER SCIENCES LAB. A PHYSICAL SCIENCES LAB. A PHOTO LAB. AN INSTRUMENTATION/DESIGN/FAB FACILITY.

INSTALLATION ARNOLD ENGINEERING DEVELOPMENT CENTER

TULLAHOMA, TN.

C.O. COL WARD E. PROTSMAN CHIEF SCIENTIST D.R. EASTMAN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	55.063	47.340
TOTAL PROCUREMENT	2.157	4.303
TOTAL O&M	1.818	1.260
TOTAL OTHE	5.378	4.231
TOTAL ANNUAL LAB	64.416	57.134
TOTAL INHOUSE	10.286	14.126
TOTAL INHOUSE RDT&E	8.873	12.617
ANNUAL OPERATING COST	4.231	4.231

PERSONNEL	PERSONNEL DATA (END OF FY 1972)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	80	4	62		18
CIVILIAN	146	3	53		93
TOTAL	226	7	115		111

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)				REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
40118	1149.163	201.411	532.348	1882.922	361.532	59.005

#### ...MISSION

PRIMARY MISSION IS TO SUPPORT THE TIMELY ACQUISITION OF QUALITATIVE SUPERIOR AEROSPACE SYSTEMS BY CONDUCTING RESEARCH AND DEVELOPMENT TESTS IN GROUND ENVIRONMENTAL TEST FACILITIES WHICH SIMULATE THE NECESSARY FLIGHT CONDITIONS.

#### ...CURRENT IMPORTANT PROGRAMS

COMPLETED F-15 ENG/INLET COMPATIBILITY AND PRELIMINARY ENGIN TESTING. COMPLETED B-1 INLET AFTERBODY, ESCAPE CAPSULE AND WEAPONS COMPAT TESTS. A-X ENGINE TEST PREPARATION WAS CONDUCTED. DEFENCE SUPPRESSION DRONE/RPV WIND TUNNEL TESTS WERE CONDUCTED. OTHER SIGNIF TESTS. MINUTEMAN, SPACE SHUTTLE, ABRES ECN PODS AIRBRN LASER

#### ...FUNCTIONS/EQUIPMENT/CAPABILITIES

AEDC IS COMPRISED OF ABOUT 33 MAJOR TEST UNITS HAVING A CAPITAL VALUE OF MORE THAN \$400 MILLION. INCLUDED ARE 15 WIND TUNNELS WITH TEST SECTION SIZES TO 16 FT SQ AND SPEEDS RANGING FROM SUBSONIC TO MACH NO 22, SIX TURBINE ENGINE TEST CELLS WHICH CAN PROVIDE TRUE SIMULATION TO ABOVE MACH 3. FOUR ROCKET ALTITUDE TEST CELLS, THE LARGEST RATED AT ONE-HALF MILLION LBS THRUST, THREE HYPERBALLISTIC RANGES, AND FOUR SPACE SIMULATION CHAMBERS, THE LARGEST BEING 42 FT DIAM BY 82 FT HIGH. THESE TEST FACILITIES HAVE SUPPORTED THE DEVELOPMENT AND QUALIFICATION OF EVERY MAJOR AERONAUTICAL, MISSILE AND SPACE SYSTEM INITIATED SINCE 1954. THROUGH ADEQUATE PLANNING OF AN ENVIRONMENTAL TEST PROGRAM IN THESE FACILITIES, DEVELOPMENT PROGRAM MANAGERS CAN HELP TO ASSURE THAT SYSTEM DESIGN DEFICIENCIES ARE FOUND EARLY, PREVENTING COST AND SCHED OVERRUNS.

# INSTALLATION AVIONICS LABORATORY

WPAFB, OH.

C.O. COL M. MICHAEL BONNER CH. SCIENTIST DR. B. H. LIST

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	100.858	93.243
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	7.419	8.726
TOTAL ANNUAL LAB	108.277	101.969
TOTAL INHOUSE	8.682	8.585
TOTAL INHOUSE RDT&E	7.124	6.685
ANNUAL OPERATING COST	3.797	3.761

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	161	17	103	58
CIVILIAN	584	20	354	230
TOTAL	745	37	457	288

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)			TOTAL	COST (MILLION \$)	
	LAB	ADMIN	OTHER		REAL PROP	EQUIP
264	218.583	5.304	264.277	488.164	21.008	35.638

## ...MISSION

MAINTAINS A BASE OF AVIONICS TECH&DEVELOPS&DEMONSTRATES COST-EFFECTIVE AVIONIC SYSTEMS TO IMPROVE OPERATIONAL CAPABILITIES IN NAV, COMM, EW, RECON, SURVEILLANCE&WPN DEL. PROVIDE SYS SUPPORT TO AFSC&ALL USAF OPERATIONAL UNITS&MODIFICATION OF AVIONICS IN THE INVENTORY

## ...CURRENT IMPORTANT PROGRAMS

DEVELOP TECHNIQUES FOR TGT DETECTION, TGT TRACKING&WEAPON DELIVERY  
EXPLOIT DIGITAL AVIONICS TECH FOR APPLICATIONS IN SPACE  
DEVELOP GIMBALD ELECTROSTATIC GYRO FOR AIRCRAFT NAVIGATION (GEANS)  
DEVELOP LASER COMMUNICATIONS FOR SPACE APPLICATIONS  
DEVELOP FORWARD LOOKING ADVANCED MULTIMODE RADAR (FLAMR)

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

CONDUCTS IN-HSE R&D TO MAINTAIN A HIGH DEGREE OF TECHNICAL COMPETENCE.  
ACTS AS AFSC FOCAL POINT FOR INFO IN ASSIGNED TECHNICAL AREAS. EXECUTES ASSIGNED PROJECTS FOR AND WORKS CLOSELY WITH ARMY, NAVY, NASA, ARPA, & OTHER GOVT AGENCIES. SUPPORTS AFSC PROGRAMS AND INSURES THE RAPID APPLICATION OF RESEARCH&TECHNOLOGY TO ADVANCED SYSTEMS. PROVIDES TECHNICAL SUPPORT TO CURRENT&FUTURE SYSTEMS PROGRAMS&OPERATIONAL SUPPORT PROJECTS IN AREAS OF ASSIGNED MISSION. PERFORM CONCEPTUAL PLANNING, ANALYSIS&STUDIES. MAJOR FAC/ EQUIP ARE-ELECTROOPTICAL SURVEILLANCE FAC WITH 48 IN OPERATION-DYNAMIC ANALYZER FOR ADVANCED RECON SYSTEMS-LASER RESEARCH FAC-SOLID STATE INTEGRATED CIRCUITS LAB ELECTROMAGNETIC TECHS COUNTERMEASURES LAB INCL ECM UCM SIMULATION FAC.

INSTALLATION CAMBRIDGE RESEARCH LABS

L.G. HANSCOM FLD, MS.

C.O. COL WILLIAM K. MORAN CH. SCIENTIST DR. JOHN N. HOWARD

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	56.240	52.710
TOTAL PROCUREMENT	1.353	0.558
TOTAL O&M	0.001	0.001
TOTAL OTHER	3.365	2.130
TOTAL ANNUAL LAB	60.959	55.399
TOTAL INHOUSE	34.050	34.974
TOTAL INHOUSE RDT&E	32.030	32.843
ANNUAL OPERATING COST	7.100	7.172

PERSONNEL	PERSONNEL DATA (END OF FY 1972)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	182	14	70		112
CIVILIAN	977	159	599		378
TOTAL	1159	173	669		490

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
859	614.773	19.708	125.916	760.397	20.554	64.228

#### ...MISSION

CONDUCTS AND SUPPORTS AF RELEVANT RESEARCH AND EXPLORATORY DEVELOPMENT IN ENVIRONMENTAL, ENGINEERING, AND PHYSICAL SCIENCES WITH MAJOR EMPHASIS ON GEOPHYSICS AND ELECTRONICS. ALSO CONDUCTS AND SUPPORTS SPECIFICALLY ASSIGNED ADVANCED DEVELOPMENT EFFORTS.

#### ...CURRENT IMPORTANT PROGRAMS

IONOSPHERIC MAPPING AND FORECASTING FOR COMMUNICATIONS  
SHORT RANGE TERMINAL FORECASTING  
RADIATION HARDENING OF DEVICES AND INTEGRATED CIRCUITS  
OPTICAL AND INFRARED BACKGROUND MEASUREMENTS  
DENSITY SATELLITE MEAS FOR LOW ALTITUDE ORBITAL SYSTEMS

#### ...FUNCTIONS/EQUIPMENT/CAPABILITIES

CONDUCTS RESEARCH AND TECHNICAL DEVELOPMENT IN TERRESTRIAL, AEROSPACE, OPTICAL, AND SOLAR PHYSICS, IN EM WAVE PROPAGATION, AND IN ELECTRONICS, ENERGY CONVERSION, SOLID STATE AND INFORMATION SCIENCES RELATING TO AIR FORCE NEEDS. EQUIPMENT AND FACILITIES INCLUDE RADIO AND OPTICAL TELESCOPES FOR SOLAR RESEARCH: S,X,AND L BAND RADARS AND A C-130 AIRCRAFT FOR METEOROLOGICAL RESEARCH: ROCKET AND BALLOON LAUNCH FACILITIES, TWO KC-135 AND TWO C-130 AIRCRAFT FOR OPTICAL, UPPER ATMOSPHERIC AND NEAR SPACE STUDIES: FACILITIES FOR GROWTH OF ELECTRONIC MATERIALS, A VAN DE GRAAFF ACCELERATOR, COBALT 60 SOURCE, 12 MEV LINAC, 29 FOOT MILLIMETER WAVE ANTENNA ALL FOR ELECTRONICS RELATED PROGRAMS, AND A CDC 6600 COMPUTATIONAL NETWORK.

# INSTALLATION EASTERN TEST RANGE

PATRICK AFB, FL.

C.O. MG D.M. JONES

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	153.255	118.333
TOTAL PROCUREMENT	0.666	2.553
TOTAL O&M	137.377	106.644
TOTAL OTHER	47.653	47.098
TOTAL ANNUAL LAB	338.951	274.628
TOTAL INHOUSE	115.506	107.623
TOTAL INHOUSE RDT&E	39.495	36.872
ANNUAL OPERATING COST	9.144	8.733

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	1507	34	103	1404
CIVILIAN	1875	1	112	1763
TOTAL	3382	35	215	3167

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	COST (MILLION \$)	
	LAB	ADMIN	OTHER		REAL	PROP
18203	130.543	739.482	7044.196	7914.221	370.670	519.800

...MISSION  
BALLISTIC MISSILE TESTING(R&D)  
SPACE LAUNCH  
DASO  
OT/FOT

...CURRENT IMPORTANT PROGRAMS  
PERSHING  
ATLAS/AGENA USAF PROGRAMS  
TITAN 3  
POLARIS  
POSEIDON

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
GUIDANCE VERIFICATION  
TRACKING SHIP  
TELEMETRY MISSILES/SATELLITES  
RDR TRACKING MISSILES/SATELLITES  
IMPACT SCORING  
TELEMETRY SHIP  
TELEMETRY AIRCRAFT  
PHOTOGRAPHY  
DATA PROCESSING  
SPACE(AND MISSILE)LAUNCH FACILITY  
COMMUNICATIONS  
COMMAND CONTROL

# INSTALLATION FLIGHT DYNAMICS LABORATORY

WPAFB, OH.

C.O. COL C.A. SCOLATTI CH. SCIENTIST DR. DEMETRIUS ZONARS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	68.472	46.846
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.640	0.125
TOTAL OTHER	1.765	2.058
TOTAL ANNUAL LAB	70.877	49.029
TOTAL INHOUSE	25.587	22.447
TOTAL INHOUSE RDT&E	23.822	20.389
ANNUAL OPERATING COST	4.305	4.520

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	198	4	97	101
CIVILIAN	941	34	511	430
TOTAL	1139	38	608	531

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF LAB	SQUARE FEET ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
90	541.130	60.600	26.000	627.730	22.705	54.000

## ...MISSION

1DEVEL OF CONTROL CONFIGURED FLT VEH DES FOR ACTIVE FLUTTER, RIDE AND  
MANUEVER CONTROL 2AIR CUSHION LANDING GEAR DEVEL 3DETERM OF DYNAMIC  
CHARACTERISTICS OF COMPOSITE STRUCTURES 4EXPER TO OBTAIN DES CRITERIA ON  
DELAY BUFFET ONSET TRANSONIC SPEEDS

## ...CURRENT IMPORTANT PROGRAMS

DETERMINED DESIGN CRITERIA FOR JOINTS IN FILAMENT COMPOSITE STRUCTURES  
COMPL FIELD TESTS ESTAB AURAL DETECTION CRITERIA FOR QUIET AIRCRAFT  
PREPARED DESIGN GUIDELINES RE FRACTURE MECHANICS FOR AIRCRAFT APPLICATIO  
GROUND SIMULATION OF B-1A FLT CONTROL SYS FOR 3 CONTRACTORS DESIGNS  
FLIGHT DEMONSTRATION POWERED EJECTION SEAT FOR INCREASED CREW SURVIVAL

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

1DEVELOP FLIGHT CONTROL SYSTEM AND PILOTS DISPLAY FOR LANDING SYSTEM  
FOR ZERO ZERO WEATHER 2DEVELOP OPTIMAL FLIGHT VEHICLE DESIGN CRITERIA  
FOR NON-NUCLEAR COMBAT SURVIVABILITY 3DESIGN FLIGHT CONTROL SYSTEM FOR  
TACTICAL AIR TO GROUND AND AIR TO AIR PRECISION WEAPON DELIVERY 4DEMON-  
STRATE FULL SCALE AIR CUSHION LANDING GEAR PERMITTING MAXIMUM FLEX-  
IBILITY IN SITES FOR GROUND CARGO DELIVERY BY AIRCRAFT 5INTEGRATE TECH-  
NOLOGIES FOR DESIGN OF ACFT FOR OPTIMAL TRANSONIC COMBAT EFFECTIVENESS  
PLAN AND EXECUTE USAF EXPLORATORY AND ADVANCED DEV PROGRAMS FOR AEROSPCE  
FLT VEHICLE STRUCTURES FLT MECHANICS FLT CONTROL VEHICLE DYNAMICS AND  
VEHICLE EQUIPMENT PROVIDE TECH OR MGT ASSIST IN SUPPORT OF STUDIES ANAL-  
YSES DEV PLANS TEST EVALUATION MODIFICATION OF AEROSPACE SYS AND EQUIP

# INSTALLATION FLIGHT TEST CENTER

EDWARDS AFB, CA.

C.O. BG M.L. LANE CHIEF SCIENTIST COL R.C. LATAROP

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	49.619	47.454
TOTAL PROCUREMENT	0.005	0.032
TOTAL O&M	2.560	2.125
TOTAL OTHER	28.106	30.942
TOTAL ANNUAL LAB	80.290	80.553
TOTAL INHOUSE	64.978	67.413
TOTAL INHOUSE RDT&E	35.641	35.878
ANNUAL OPERATING COST	10.532	11.679

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	3101	20	271	2830
CIVILIAN	1775	0	174	1601
TOTAL	4876	20	445	4431

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
246323	541.686	323.084	6405.099	7269.869	178.899	423.455

...MISSION  
PLAN/CONDUCT QUANTITATIVE ENG. DEVELOPMENT TEST & EVALUATION OF MANNED/  
UNMANNED AERO VEH. EVAL INCLUDING AERODYN PERF/STAB/CONTROL, SYS & SUBSYS  
GND SUPT EQUIP. MAINTAINABILITY/RELIABILITY AERO DECELTRS, CONDUCT RSCH TO SP  
T MSN. OPR AF TST PLT SCH. SUPPORT .NASA, DOD, GOV CONTRACTOR

...CURRENT IMPORTANT PROGRAMS  
DRONE/REMOTELY PLTD VEH DT&E (SYS/PROG 468A)  
A/X PROTOTYPE DEVELOP (SYS/PROG 329A)  
ADV SPACE TECH/COMPONENTS (SYS/PROG 69AJ) PCHT & AERIAL RECOVERY  
F-111 & FB-111 (SYS/PROG 324A) DT&E  
F-5(E) (SYS/PROG 330B) DT&E

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
TECHNICAL FACILITIES AND EQUIPMENTS ARE AVAILABLE TO PROVIDE A COMPLETE  
RANGE OF SERVICES FOR CONDUCTING DT&E FLT TEST OF AERONAUTICAL SYSTEMS &  
CONDUCT FLIGHT EVALUATION AND RECOVERY OR RETRIEVAL OF RESEARCH VEHICLES  
, TRAIN TEST PILOTS. ENGINEERING LABS, REALTIME INSTRUMENTED RANGES, DATA  
COLLECTION, REDUCTION AND ANALYSIS LABS, PHOTO/TV, ACT/ENGINE/MAINT, TST EQP  
AND ELECTRONICS SHOPS ALONG WITH A COMPLEX OF DRY LAKES FOR RECOVERY AND  
EMERGENCY LANDING PROVIDES VARIOUS SUPPORT FOR ALL TST PROGRAMS OTHER  
MAJOR FACILITIES ARE: PRECISION IMPACT, GUNNERY/BOMB, PHOTO RESOLUTION, INFA  
RED, RADAR FIDELITY, TACTICAL, & OPTICAL RANGES & CONTRACTOR ASSIGNED HANGARS,  
SHOPS, LABS, AND OFFICE SPACE & MUNITIONS STORAGE AND CHECKOUT & JOINT PARAC  
HUTE TEST FACILITY AT EL CENTRO NAF & ENGINEERING SIMULATION LAB.

INSTALLATION FRANK J. SEILER RESEARCH LABORATORY

USAF ACADEMY, CO.

COMMANDING OFFICER COL MILTON D SPRINKEL

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	0.570	0.525
TOTAL PROCUREMENT	0.570	0.525
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.400	0.400
TOTAL ANNUAL LAB	1.540	1.450
TOTAL INHOUSE	1.540	1.450
TOTAL INHOUSE RDT&E	0.570	0.525
ANNUAL OPERATING COST	0.018	0.020

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	
MILITARY	22	11	22	0
CIVILIAN	9	1	2	7
TOTAL	31	12	24	7

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
0	9.394	2.860	0.240	12.494	1.287	1.483

#### ...MISSION

CONDUCT RESEARCH IN AEROSPACE MECHANICS, APPLIED MATHEMATICS & CHEMISTRY. ENCOURAGE & SUPPORT ACADEMY FACULTY & CADET RESEARCH BY DIRECT PARTICIPATION, MONITOR FACULTY CONSULTANT PROG, SUMMER LAB PROG, FOCAL POINT FOR USAF ACADEMY RESEARCH PROPOSED TO THE DOL RES&TECH LABORATORIES (A-SC)

#### ...CURRENT IMPORTANT PROGRAMS

FUEL CELL AND BATTERY STUDIES-ALUMINUM ANODES IN MOLTEN SALT ELECTROLYTE SYNTHESIS AND CHARACTERIZATION OF ORGANOMETALLIC MONOMERS & POLYMERS -- MODELING OPTIMIZATION PROGRAMING AND CONTROL (MATH MODELS GUIDANCE SYS.) DIFFERENTIAL GAMES (IMPERFECT INFO), NONLINEAR CONTROL THEORY & ESTIMATES MECH OF FLUIDS (LOW DENSITY SHOCK WAVES, RAM-WING THEORY, AERODYNAM SHAPES

#### ...FUNCTIONS/EQUIPMENT/CAPABILITIES

MATH MODELING OPTIMIZATION CONTROL AND GUIDANCE SYSTEMS USING BURR B6700 COMPUTER. ORGANOMETALLIC & ELECTROCHEM & NITROALIPHATIC AND FLUORONITRO-ALIPHATIC CHEMISTRY USING 6 POSITION LAB & INSTRUMENT ROOM CONTAINING ANAL NUC MAG RESONATOR SPECTROMETER, X-RAY EQUIPMENT, INFRARED SPECTROPHOTOMETER, MASS SPECTROMETER, AUTOMATIC GAS CHROMATOGRAPH & OTHER EQUIP. FLUID DYNAMICS RESEARCH USING 17 INCH LOW DENSITY SHOCK TUBE AND ASSOCIATED INSTRUMENTATION, 2 INCH HIGH DENSITY SHOCK TUBE & WIND TUNNELS. ADVANCED ANALYSIS AND EVALUATION TECHNIQUES FOR INERTIAL GUIDANCE SENSORS USING TWO-AXIS TEST TABLE (GYRO), AUTOMATIC AZIMUTH ALIGNMENT EQUIP AND ELECTRONIC CONTROL EQUIPMENT FOR 50 SERIES INERTIAL DEVICES LOCATED IN A CLASS 1000 CLEAN LAB ON 80 TON AIR SUPPORTED STABLE PLATFORM.



# INSTALLATION HUMAN RESOURCES LABORATORY

BROOKS AFB, TX.

C.O. COL GEORGE K. PATTERSON CH. SCIENTIST DR. H.L. PARRIS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	10.090	12.848
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.150
TOTAL OTHER	1.258	1.482
TOTAL ANNUAL LAB	11.348	14.480
TOTAL INHOUSE	4.472	5.357
TOTAL INHOUSE RDT&E	3.214	3.875
ANNUAL OPERATING COST	0.836	0.970

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL PROF	NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS		
MILITARY	134	7	91	43
CIVILIAN	231	38	116	115
TOTAL	365	45	207	158

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	LAB	ADMIN	OTHER		REAL PROP	EQUIP
13	62.679	29.544	31.539	123.762	1.925	4.102

## ...MISSION

PRINCIPAL AF INTERFACE WITH SCIENCE, INDUSTRY AND OTHER GOVT AGENCIES FOR MANAGEMENT OF BASIC, EXPLORATORY, AND ADVANCED DEVELOPMENT R&D PROGRAM IN PERSONNEL SELECTION, MANAGEMENT AND TRAINING, AND THE EVALUATION OF NEW TECHNICAL DEVELOPMENTS FOR APPLICATION TO AF PROBLEMS.

## ...CURRENT IMPORTANT PROGRAMS

HUMAN FACTORS IN DESIGN OF TRAINING SYSTEMS. SIMULATION TECHNIQUES FOR AEROSPACE CREW TRAINING. ADVANCED INSTRUCTIONAL SYSTEMS AND ADVANCED SIMULATION FOR UNDERGRADUATE PILOT TRAINING. DESCRIBING, EVALUATING AND STRUCTURING AIR FORCE OCCUPATIONS. OOD MANPOWER DEVELOPMENT PROGRAM EVALUATION AND IMPROVEMENT.

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

FUNCTIONAL AREAS OF OCCUPATIONAL ANALYSIS, PERSONNEL PROCUREMENT, PERSONNEL CLASSIFICATION, RETENTION AND SEPARATION, PERSONNEL SYSTEM COMPUTER SIMULATION MODELS, MANPOWER REQTS OF AF WEAPONS SYS TRAINING TECHNIQUES, DESIGN OF SIMULATORS AND OTHER TRAINING DEVICES CAPABILITIES CONDUCT TRAINING RESEARCH ASSOC. WITH PILOT TRAINING USING SOPHISTICATED HIGH-FIDELITY A/C SIMULATOR, ADVANCED INSTRUCTIONAL SYS FOR INDIVIDUALLY PACED COMPUTER AIDED TECH INSTRUCTION, CHECKOUT AND MAINT OF ELECTRONIC EQUIP, TECH AND PROF LIBRARY, PERSONNEL TESTING ROOMS, AUDIO VISUAL EQUIP RESEARCH SIMULATOR COCKPIT, INFINITY OPTICS DISPLAY, RAYTHEON PB440 DIGITL COMPUTER, IBM 7040 ELECTRONIC DATA PROCESSING SYSTEM WITH 6 TAPES DISC FILE, CARD READ/PUNCH PRINTER AND INQUIRY STATION, VISUAL DISPLAY DEVICE ELECTRONICS ASSOCIATES TR48 ANALOG COMPUTER.

# INSTALLATION MATERIALS LAB

WPAFB, OH

C.O. COL R.K. SAXER ACTG. DEPUTY DIR. R.T. SCHWARTZ

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	44.909	35.844
TOTAL PROCUREMENT	10.161	13.705
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.973	0.945
TOTAL ANNUAL LAB	56.043	50.494
TOTAL INHOUSE	10.676	11.570
TOTAL INHOUSE RDT&E	9.703	10.625
ANNUAL OPERATING COST	2.445	2.887

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	
MILITARY	60	20	60	0
CIVILIAN	337	46	245	92
TOTAL	397	66	305	92

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
9	0.117	0.061	0.038	0.216	6.750	10.396

## ...MISSION

PLAN, FORMULATE AND EXECUTE RESEARCH, EXPLORATORY AND ADVANCED DEVELOPMENT AND MANUFACTURING METHODS FOR NEW MATERIALS OF ALL CLASSES IN SUPPORT OF THE AF MISSION. ACT AS AFSC FOCAL POINT FOR MATERIALS TECHNOLOGY INFO. INSURE TIMELY TRANSITIONING OF NEW MATERIALS AND TECHNOLOGY TO AF SYSTEM

## ...CURRENT IMPORTANT PROGRAMS

MATERIALS AND TECHNIQUES FOR A/C STRUCTURAL INTEGRITY AND RELIABILITY.  
MATERIALS AND TECHNIQUES FOR AF WEAPONS SURVIVABILITY AND HARDENING.  
TACTICAL AND LIMITED WARFARE MATERIALS AND TECHNOLOGY SUPPORT.  
MANUFACTURING TECHNOLOGY OF NEW MATERIALS FOR SYSTEMS APPLICATION.  
ADV COMPOSITES, METALS AND ALLOYS FOR AIRFRAME AND PROPULSION STRUCTURES.

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

MATERIALS RESEARCH AND DEVELOPMENT FACILITIES AND CAPABILITIES FOR:  
AEROSPACE STRUCTURES, TPS FOR BALLISTIC RV, AND ENGINES, FLUIDS, LUBRICANTS,  
FLUID CONTAINMENT, PROPULSION, COATINGS, FIBERS, ARMOR, EM WINDOWS, SENSORS,  
DISPLAYS, LASERS AND OPTICAL DEVICES, ELECTRONIC COMPONENTS, NON-DESTRUCT  
TESTING, POLYMERS, ADHESIVES, NONMETALLIC MATRIX COMPOSITES, ELASTOMERS,  
METALS, ALLOYS, METAL AND CERAMIC COMPOSITES, METAL PROCESSING,  
INTERMETALLICS, CERAMICS, STATIC AND DYNAMIC BEHAVIOR, JOINING, GRAPHITE,  
ELECTRONIC AND MAGNETIC MATERIALS, PHYSICAL CHEMICAL ANALYSIS. OTHER  
MAJOR MATERIALS FUNCTIONS: MANUFACTURING TECHNOLOGY, SYSTEMS APPLICATION  
SYSTEMS SUPPORT.

# INSTALLATION ROCKET PROPULSION LABORATORY

EDWARDS AFB, CA.

C.O. COL THOMAS A. MCCREERY CH. SCIENTIST DR. FRANK KELLEY

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	25.851	22.416
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	3.899	2.636
TOTAL ANNUAL LAB	29.750	25.052
TOTAL INHOUSE	13.123	13.166
TOTAL INHOUSE RDT&E	10.624	10.530
ANNUAL OPERATING COST	0.280	0.270

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PRQF	
MILITARY	188	17	91	97
CIVILIAN	298	6	104	194
TOTAL	486	23	195	291

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
54400	419.046	99.248	4.780	523.074	29.869	24.003

...MISSION  
PLAN, FORMULATE, PRESENT, AND EXECUTE THE AFSC EXPLOR AND ADV DEVELOPMENT PROGRAMS IN ROCKET PROPULSION SYS, COMPONENTS, PROPELLANTS AND ACCORD EQUIP. CONDUCT IN-HOUSE RSCH. SUPPORT DEPLOYED AND DEVELOPMENTAL SYSTEMS. ACT AS AFSC FOCAL POINT FOR INFO IN THE ASSIGNED TECH AREAS.

...CURRENT IMPORTANT PROGRAMS  
INCREASE ICBM RANGE/PAYLOAD/PENETRATION CAPABILITIES AND IMPROVE SERVICE LIFE PREDICTION. INCREASE LIFE OF SATELLITE SYS. INCREASE ABILITY OF STRATEGIC ACFT TO PENTRATE TO THE TARGET. PROVIDE MAX PROPULSIVE MANEUVERING FOR SPACECRAFT. IMPROVE ACCURACY AND REDUCE COSTS OF TACTICAL ARMAMENT.

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
A COMPONENT TEST LAB AND CENTRIFUGE FOR TESTING SMALL PROPULSION SYS AND COMPONENTS UNDER SIMULATED SPACE ENVIRONMENTS, FACILITIES FOR FORMULATG AND TESTING NEW SOLID AND LIQUID PROPELLANT RKT MOTORS. A CHEM LAB FOR SYNTHESIS, ANALYSIS, AND FORMULATION OF NEW PROPELLANTS. A SOLID MOTOR TEST AND EVAL COMPLEX FOR INVESTIGATION OF COMBUSTION, AGING, STRUCTURAL INTEGRITY AND HOT COMPONENTS. AMBIENT AND ALTITUDE TESTING OF TOXIC RKTs UP TO 50,000 LB THRUST. HOT AIR CAPABILITY TO TEST AIR BREATHING PROPULSION. A FACILITY FOR TESTING REENTRY NOSE CONES. A FACILITY FOR TESTING RKT ENGINES UP TO 10,000,000 LB THRUST. IN-HOUSE ANALYTICAL CAPABILITY FOR W/S PROPULSION SYS OPTIMIZATION, TRADE-OFF AND MISSION STUDIES. A COMPUTER FACILITY FOR DESIGN, ANALYSIS, AND TEST DATA REDUCTION. SHOPS FOR FABRICATING TEST HARDWARE AND TEST SYSTEMS.

# INSTALLATION ROME AIR DEVELOPMENT CENTER

GRIFFISS AFB, N.Y.

C.O. COL P.N. LARSEN CHIEF SCIENTIST DR. IRVING GABELMAN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	92.745	105.564
TOTAL PROCUREMENT	32.377	21.350
TOTAL O&M	7.056	5.480
TOTAL OTHER	37.027	40.203
TOTAL ANNUAL LAB	169.205	172.597
TOTAL INHOUSE	37.179	36.484
TOTAL INHOUSE RDT&E	31.927	31.709
ANNUAL OPERATING COST	10.571	9.360

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	325	6	119	206
CIVILIAN	1130	15	525	605
TOTAL	1455	21	644	811

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
2817	719.708	92.402	238.531	1050.641	29.351	72.699

...MISSION  
PLANS AND EXECUTES EXPLORATORY AND ADVANCED DEVELOPMENT PROGRAMS FOR ELECTROMAG INTELLIGENCE AND RECON PROCESSING, DISPLAYS, SURVEILLANCE, RELIABILITY AND COMPATIBILITY, COMMUNICATIONS FOR AIR FORCE, DOD AND OTHER ORGANIZATIONS, PROVIDES TECHNICAL CONSULTATION TO MAJOR AIR COMMANDS.

...CURRENT IMPORTANT PROGRAMS  
OVER THE HORIZON DETECTION EXPERIMENTS AND DEVELOPMENTS  
INTELLIGENCE AND RECON EXPLORATORY DEVELOPMENTS AND FIELD SUPPORT  
INTEGRATED COMMUNICATION NAVIGATION AND IDENTIFICATION TECHNIQUES  
PAVE ONYX (ADVANCED LOCATION STRIKE SYSTEM)  
ELECTROMAGNETIC RELIABILITY AND COMPATABILITY TECH AND FIELD SUPPORT

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
PROVIDES A WELL BALANCED COMBINATION OF PROFESSIONAL SKILLS AND EXPERIMENTAL FACILITIES TO MARRY THEORETICAL STUDIES TO POTENTIAL APPLICATION. BY COMBINATION OF AIRBORNE LABORATORY MEASUREMENT IN INSTRUMENTED FLIGHT TEST AIRCRAFT AND FLEXIBLE ON-BASE AND OFF-BASE EXPERIMENTAL SITES, A HIGH DEGREE OF SOPHISTICATION IS ACHIEVED FOR CONDUCTING GROUND ELECTROMAGNETIC STUDIES AND EXPERIMENTS. CAPABILITIES ARE AVAILABLE FOR CONDUCTING HIGH AND LOW-POWER EXPERIMENTS OVER ELECTROMAGNETIC SPECTRUM FROM EXTREMELY LOW FREQUENCIES TO LIGHT. SCIENTIFIC STUDIES ARE PERFORMED USING ONE OF THE NATIONS LARGEST ON-LINE TIME SHARING COMPUTERS. RESOURCES ARE PRIMARILY USED IN EXPLORATORY AND ADVANCED DEVELOPMENTS AND EXTENDING TO TECHNICAL SUPPORT THIRTY-FIVE OTHER AIR FORCE AND DOD ORGANIZATIONS.

# INSTALLATION SPACE AND MISSILE TEST CENTER

VANDENBURG AFB, CA.

C.O. MG JESSUP D. LOWE TECH. DIR. S.R. RADOM

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	77.617	65.157
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	7.243	7.013
TOTAL ANNUAL LAB	84.860	72.170
TOTAL INHOUSE	26.595	24.488
TOTAL INHOUSE RDT&E	19.452	17.675
ANNUAL OPERATING COST	15.660	13.031

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	452	5	253	199
CIVILIAN	395	1	155	240
TOTAL	847	6	408	439

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL REAL PROP	EQUIP	
45546	91.407	354.384	431.954	877.745	96.600	495.861

...MISSION  
MANAGE SPACE AND MISSILE FIELD TEST OPERATIONS. INSURE TIMELY DEVELOPMENT OF TEST CAPABILITY INCLUDING PERSONNEL, FACILITIES, INSTRUMENTATION AND DOCUMENTATION.

...CURRENT IMPORTANT PROGRAMS  
MINUTEMAN II & III OPERATIONAL TRAINING  
SAFEGUARD SYSTEM TEST TARGET PROGRAM-MINUTEMAN & TITAN BOOSTERS  
ABRES PROGRAMS  
CLASS & UNCLASS SPACE LAUNCHES USING ATLAS, THOR, TITAN & SCOUT BOOSTERS  
MINUTEMAN III R&D

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
SAMTEC CAPABILITIES INCLUDE TEST LAUNCH AND RANGE SUPPORT. THE FORMER INCLUDES VEHICLE & PAYLOAD CHECKOUT, ASSEMBLY, & PRELAUNCH TESTING FOR BOOSTERS/WEAPON SYSTEMS SUCH AS THOR, ATLAS, TITAN 2&3, & MINUTEMAN 3. THE LATTER INCLUDES BOTH LONG & SHORT RANGE INSTRUMENTATION PLANNING & SCHEDULING OF ORBITAL, BALLISTIC & PROBE LAUNCHES & AIRCRAFT FLYBY & AND OTHER TESTS. A VARIETY OF FIXED & MOBILE ELECTRONIC & OPTICAL INSTRUMENTATION IS AVAILABLE ON THE WEST COAST, PACIFIC ISLANDS, AND SHIPS & AIRCRAFT TO GATHER RANGE SAFETY AND PROGRAM TEST DATA. LAUNCH AZIMUTHS VARY FROM 165 TO 310 DEGREES. LAUNCH FACILITIES AND RANGE INSTRUMENTATION CAN BE RECONFIGURED TO MEET NEW PROGRAM REQUIREMENTS. IMPACT SCORING OF BALLISTIC PAYLOADS IS AVAILABLE AT TWO DOWNRANGE SITES AND IN THE BROAD OCEAN AREA.

# INSTALLATION USAF SCHOOL OF AEROSPACE MEDICINE

BROOKS AFB, TX.

C.O. COL EVAN R. GOLTRA

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	10.886	10.383
TOTAL PROCUREMENT	0.536	0.550
TOTAL O&M	0.898	1.036
TOTAL OTHER	5.078	5.621
TOTAL ANNUAL LAB	17.398	17.590
TOTAL INHOUSE	15.196	15.539
TOTAL INHOUSE RDT&E	9.013	8.349
ANNUAL OPERATING COST	3.113	2.831

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	603	92	224	379
CIVILIAN	357	40	127	230
TOTAL	960	132	351	609

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
93	452.305	95.830	59.114	607.049	15.377	21.932

...MISSION  
RESEARCH IN LIFE SUPPORT AEROSPACE MEDICINE  
BIOLOGICAL SCIENCES  
CLINICAL EVALUATIONS  
EDUCATION AND TRAINING

...CURRENT IMPORTANT PROGRAMS  
BIOLOGICAL EFFECTS OF COHERENT RADIATION  
CABIN HABITABILITY STUDIES  
ARMED FORCES ENTRANCE EXAMINING SYSTEM  
PERFORMANCE DECREMENT NEUTRON GAMMA STUDIES AND RF RADIATION  
DRUG DETECTION AND SCREENING STUDIES

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
USAF SCHOOL OF AEROSPACE MEDICINE RESEARCH IN AEROSPACE MED PROBLEMS  
ENVIRONMENTAL STRESS DEVELOPMENTAL ENGINEERING RADIOBIOLOGY LASER  
HAZARDS BIOMETRICS BIOSCIENCE BIOMED ENGINEERING AND EPIDEMIOLOGY  
FACILITIES WHOLE BODY COUNTER HUMAN CENTRIFUGE VARIOUS TEST CELLS AND  
CHAMBERS COCKCRAFT WALTON ACCELERATOR NEUTRON GENERATOR PHILCO 2000  
DIGITAL COMPUTER ROTATIONAL FLIGHT SIMULATOR KILO CURIE CO 60  
RADIATION SOURCE AEROSPACE MEDICAL SCIENCE LAB AEROSPACE MEDICAL  
CONSULTATIVE SERVICES AEROMEDICAL EVALUATION CLINICAL SCIENCE CCULO  
THERMAL RESEARCH OPTICAL AUDIOLOGY VESTIBULAR PSYCHOBIOLOGY RADIO  
ISOTOPE AEROSPACE MEDICAL STANDARDS AND LASER HAZARDS FACILITIES  
ZEISS PHOTO COAGULATOR VECTORCARDIOGRAPH MACHINE BALLISTOCARDIOGRAPH  
MACHINE PHONOCARDIOGRAPH MACHINE AND MASS SPECTROMETERS

# INSTALLATION WEAPONS LABORATORY

KIRTLAND AFB, N.M.

C.O. COL ROBERT W. ROWDEN CH. SCIENTIST MAJ WM. A. WHITAKER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972	1973
	(ACTUAL)	(ACT + EST)
TOTAL RDT&E	75.218	94.120
TOTAL PROCUREMENT	0.000	1.450
TOTAL O&M	0.287	0.244
TOTAL OTHER	10.199	10.607
TOTAL ANNUAL LAB	85.704	106.421
TOTAL INHOUSE	40.866	42.181
TOTAL INHOUSE RDT&E	30.577	31.574
ANNUAL OPERATING COST	0.000	0.000

PERSONNEL	PERSONNEL DATA (END OF FY 1972)		TOTAL	NON-PROF
	AUTHORIZED STRENGTH	PHDS		
MILITARY	796	96	572	224
CIVILIAN	397	20	188	209
TOTAL	1193	116	760	433

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN		OTHER	REAL PROP
934	428.659	14.620	22.187	465.466	10.791	33.887

...MISSION  
PLAN AND EXECUTE RSCH,EXPLORATORY,ADV,AND ENGRG DEV PRGMS ON DEVICES,EFFECTS,AND HAZARDS FOR NUC,LASER,AND ADV WPNS.COND CIV ENGRG RDT&E PRGMS. DEV CRITERIA AND ASSESSES NUC HARDNESS OF WPN SYS.PROVIDES TECH ASSISTANCE FOR NUC WPN SYS INTEGRATION.FOCAL POINT FOR NUC SYS SAFETY ASPECTS.

...CURRENT IMPORTANT PROGRAMS  
LASER WEAPON TECHNOLOGY  
AEROSPACE FACILITIES TECHNOLOGY  
NUCLEAR SURVIVABILITY/VULNERABILITY ANALYSIS AND TESTING  
NUCLEAR SAFETY ANALYSIS AND DESIGN CRITERIA  
NUCLEAR WEAPONS EFFECTS ANALYSIS AND TESTING

...FUNCTIONS/EQUIPMENT/CAPABILITIES  
NUCLEAR WEAPONS EFFECTS RESEARCH, SIMULATION, SAFETY, TEST PARTICIPATION AND ANALYSIS OF WEAPON SYSTEMS NUCLEAR HARDNESS ARE CONDUCTED IN NUCLEAR ENGINEERING TEST LABORATORIES AND PHYSICS LABORATORIES. SIMULATION TESTS ON MISSILES, AIRCRAFT, AND COMPONENTS USE ELECTROMAGNETIC PULSE SIMULATORS, GAS GUNS, PULSE POWER, AND X-RAY DEVICES. LASER WEAPON DEVELOPMENT USES LASER/OPTICS LABORATORIES AND TEST RANGE WITH LARGE, HIGH-POWER DEVICES. CIVIL ENGINEERING RESEARCH, EXPLORATORY, ADVANCED DEVELOPMENT AND TESTING USES SOILS-, ENVIRONMENTAL-, AND CHEMICAL LABORATORIES AND SHOCK TUBES FOR SIMULATION. TECHNICAL LIBRARY, METALLURGY- AND METROLOGY LABORATORIES, AN EQUIPMENT POOL OF VARIED DIAGNOSTIC AND METERING DEVICES, DUAL CDC-6600 COMPUTERS WITH REMOTE TERMINALS AND MULTI-CHANNEL RECORDING AND DATA REDUCTION SUPPORT RESEARCH AND TESTS.

INSTALLATION 6570 AEROSPACE MEDICAL RESEARCH LABORATORY WPAFB, OH

C.O. COL C.L. HOLT

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	12.798	12.435
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	1.520	1.520
TOTAL ANNUAL LAB	14.318	13.955
TOTAL INHOUSE	9.613	8.774
TOTAL INHOUSE RDT&E	8.093	7.254
ANNUAL OPERATING COST	1.025	1.006

PERSONNEL	PERSONNEL DATA (END OF FY 1972)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	127	29	77	50
CIVILIAN	168	26	96	72
TOTAL	295	55	173	122

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
30	211.900	10.000	15.200	237.100	11.570	15.938

#### ...MISSION

CONDUCT R&T TO DEFINE MANS PERFORMANCE PHYSIOLOGICAL TOLERANCE, PERSONAL PROT NEEDS, AND DEVELOP PROTECTIVE TECHNIQUES AND EQUIP TO SUSTAIN AND ENHANCE HIS PERF IN AF OPERATIONAL ENVIRONMENTS TO EST DESIGN CRITERIA AND PROVIDE SUPPORT TO SYSTEM DEVELOPMENT IN ABOVE AF&AS

#### ...CURRENT IMPORTANT PROGRAMS

DEFINE TOXIC HAZARDS ENVIR POLLUTION EFF OF MISSILE OPS PROPELLANT TEST  
DEVELOP A HUMAN PERF METHOD TO COUNTER OPTICALLY AIMED WEAPONS  
INV HELMET MOUNTED SIGHT SYS FOR FLT CONTROL AND WEAPON DELIVERY APPLNS  
INV HIGH G PILOT SEAT CONTROLS + DISPLAYS DESIGN FOR OPS ABOVE 8 G,S  
DETERMINE MANS EXP LIMITS, CAPABILITY, PROT REQ DURING ESCAPE FROM ADV A/C

#### ...FUNCTIONS/EQUIPMENT/CAPABILITIES

MAJOR FUNCTIONS 1. IDENTIFY, QUANTITATE AND DETERMINE TOXIC HAZARDS AND ENVIRONMENTAL POLLUTION EFFECTS CREATED BY AF OPS 2. DEVELOP NEW CONCEPTS AND DESIGN CRITERIA TO DEFINE MAN MACHINE SYSTEM EFFECTIVENESS IN AF OPS 3. PROVIDE HUMAN ENGINEERING DATA, PRINCIPLES AND TECHNIQUES APPLICABLE TO DESIGN, TEST, OPS MAINTENANCE OF AF SYSTEMS AND EQUIP 4. STUDY EFFECTS, DEFINE MANS TOLERANCE AND PERFORMANCE DURING BIODYNAMIC AND COMBINED STRESS OF AF OPERATIONS

MAJOR EQUIP FACILITIES HUMAN ENGINEERING RESEARCH LAB, TOXIC HAZARDS RESEARCH LAB, RESEARCH ANIMAL FACILITY, BIODYNAMIC NOISE, VIBRATION, IMPACT, ACCELERATION AND COMBINED STRESS LAB MAN RATED ALTITUDE AND ENVIRONMENT CHAMBER SIMULATION FACILITIES



# INSTALLATION ARMED FORCES RADIOBIOLOGY RES. INSTITUTE

C.O. CAPT MYRON I. VARON

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1972 (ACTUAL)	1973 (ACT + EST)
TOTAL RDT&E	3.127	3.086
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.856	1.676
TOTAL ANNUAL LAB	3.983	4.762
TOTAL INHOUSE	3.950	4.362
TOTAL INHOUSE RDT&E	3.094	3.046
ANNUAL OPERATING COST	1.043	0.951

PERSONNEL	PERSONNEL DATA (END OF FY 1972)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	83	20	47		36
CIVILIAN	138	14	39		99
TOTAL	221	34	86		135

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
10	24.660	14.906	32.913	72.479	7.899	2.849

## ...MISSION

THE MISSION OF AFRRRI SHALL BE TO CONDUCT SCIENTIFIC RESEARCH IN THE FIELD OF RADIOBIOLOGY AND RELATED MATTERS THAT ARE ESSENTIAL TO THE MEDICAL SUPPORT OF THE DEPARTMENT OF DEFENSE

## ...CURRENT IMPORTANT PROGRAMS

BIOCHEMICAL DIAGNOSIS OF MALIGNANT AND METASTATIC TUMORS  
ACUTE EFFECTS OF NON-IONIZING ELECTROMAGNETIC RADIATION  
EFFECTS OF HEAD INJURY ON BLOOD FLOW AND BRAIN FUNCTION  
NEUROLOGIC EFFECTS OF IONIZING RADIATION AND DRUGS  
STIMULATION OF MARROW RECOVERY POSTIRRADIATION

## ...FUNCTIONS/EQUIPMENT/CAPABILITIES

FUNCTIONS: OPERATE FACILITIES FOR CONDUCTING RADIOBIOLOGY RESEARCH AND DISSEMINATING RESULTS& CONDUCT ADVANCED TRAINING& OPERATE FACILITIES FOR PRODUCTION OF SHORT-LIVED RADIOISOTOPES& AND PERFORM OTHER SUCH RESEARCH FUNCTIONS AS REQUIRED. MAJOR EQUIPMENT INCLUDES: PULSE AND STEADY STATE NUCLEAR REACTOR, 50,000-CURIE COBALT-60 IRRADIATOR, POSITIVE ION ACCELERATOR, ELECTRON MICROWAVE ACCELERATOR, AND X-RAY MACHINES, WITH ASSOCIATED EXPOSURE ROOM COMPLEXES. SUPPORT SERVICES INCLUDE: MEASUREMENT OF RADIATION FIELDS, PROVISION AND CARE OF LABORATORY ANIMALS, EQUIPMENT DESIGN AND FABRICATION ASSISTANCE, REAL-TIME DATA ACQUISITION SYSTEM, TELEVISION AND FILM DOCUMENTATION OF EXPERIMENTS, PERSONNEL AND ENVIRONMENTAL MONITORING, EDITORIAL ASSISTANCE IN REPORT PREPARATION, AND A LARGE TECHNICAL LIBRARY.

APPENDIX 1

Changes in Organization or Name \*

Department of the Army

Previous

As of 1 July 1972

Behavioral Science Research Laboratory  
Washington, D.C.

Research Institute for Behavioral  
and Social Sciences  
Washington, D.C.

Biological Laboratories  
Fort Detrick, Maryland

Disestablished.

Combat Surveillance Group  
Fort Monmouth, New Jersey

Combat Surveillance and Target  
Acquisition Laboratories  
Fort Monmouth, New Jersey

Watervliet Arsenal Laboratories  
Watervliet, New York

Benet Weapons Laboratory  
Watervliet, New York

Missile Command R&D Laboratories  
Redstone Arsenal, Alabama

Missile Research, Development and  
Engineering Laboratory  
Redstone Arsenal, Alabama

General Equipment Test Activity  
Fort Lee, Virginia

Disestablished.

Airborne Electronics and Special  
Warfare Board  
Fort Bragg, North Carolina

Airborne Communications and  
Electronics Board  
Fort Bragg, North Carolina

Department of the Navy

Naval Ship Research and Development  
Laboratory  
Panama City, Florida  
(formerly component of Naval Ship  
Research and Development Center,  
Washington, D.C.)

Now a separate activity.

Naval Training Devices Center  
Orlando, Florida

Deleted. In-house RDT&E less  
than 25% of total in-house effort.

Naval Electronics Systems Test and  
Evaluation Facility  
Patuxent River, Maryland

Deleted. In-house RDT&E less  
than 25% of total in-house effort.

\*Changes since publication of Department of Defense In-House RDT&E  
Activities, 30 October 1971.

Department of the Air Force

Aerospace Medical Laboratory (clinical)      Disestablished.  
Lackland AFB, Texas

## APPENDIX II

### Definitions

1. *In-House RDT&E Activities*--Those organizational entities engaged in performing work in any or all of the categories of research, development, test and evaluation. The RDT&E effort, however, should represent a minimum of 25 percent of the total effort of each entity reporting in order to be considered as an RDT&E activity.

2. *Professionals*--Full-time government scientific and engineering personnel actively engaged in RDT&E activities. In the case of civilians, this will include all those holding positions that fall into the following categories under the Civil Service Occupational Groups and Series of Classes, General Schedule:

150	440	665	871	1330
180	454	668	880	1340
190	457	680	881	1350
193	460	690	890	1360
401	470	701	892	1370
403	471	801	893	1372
405	482	806	894	1382
410	486	808	896	1384
413	487	810	1301	1386
414	601	819	1306	1510
430	602	830	1310	1515
434	635	840	1313	1520
435	644	850	1315	1529
436	660	855	1320	1530
437	662	861	1321	1540

Military professionals, both officer and enlisted, actively engaged in RDT&E activities should be identified with the functions described in the above-referenced civilian job series. Generally, these jobs are referenced in Department of Defense Occupational Conversion Tables DoD 1312.1-0, DoD 1312.1-E under DoD groups 5 and 6 of DoD 1312.1-0, and various other groups of DoD 1312.1-E, published under the provisions of DoD Instruction 1312.1. Lawyers, accountants, chaplains, social workers and educators should be excluded.

3. *Technicians*--Generally nonprofessionals working on an RDT&E project or program in support of a professional. In the case of civilians, it will include, but will not necessarily be limited to, those holding positions that fall into the following categories of the Civil Service Occupational Groups and Series of Classes, General Schedule:

181	636	681	895
404	645	682	1311
421	646	683	1316
455	647	698	1341
458	649	699	1371
462	650	802	1374
621	661	817	1521
622	667	818	1531
625	669	856	1541

Discretion will have to be exercised by each RDT&E activity in determining the number of military technicians. Generally, they should follow the guidelines established in defining civilian technicians and can be identified in DoD 1312.1-E.

4. *Real Property Cost*--Each reporting activity will be responsible for determining and reporting the cost of real property. This cost should be established in accordance with the guidelines and definitions in DoD Instruction 4165.14. This should also include the cost of installed equipment.

5. *Equipment Cost*--Each reporting activity will be responsible for determining and reporting the cost of personal property. This cost will include those costs incurred by the acquisition (including installation, when applicable) of all property other than real property. It will include personal property such as machine tools, environmental test equipment, furniture, laboratory equipment, vehicles, etc. Items having a unit cost of less than \$200 may be excluded.

6. *Space*--The data to be furnished should include only walled and roofed building space. It should not include such things as parking lots, open storage areas, lean-tos, etc. The source of data may be the annual report submitted in compliance with the requirements of DoD Instruction 4165.14.

7. *In-House Obligations*--Obligations reported under this category are for activities performed, or to be performed, by the organizational entity. Their work is carried on directly by their own personnel. Particular care should be taken to include under in-house performance the cost of supplies and equipment essentially of an off-the-shelf nature that are procured for use in in-house research and development, plus such things as travel, publications, and other types of services in support of in-house functions and M.P.A. Excluded from the in-house total are expenses for planning and administering programs by DoD personnel of contracts and grants for out-of-house work and M.C.A.

8. *Out-of-House Obligations*--Obligations reported under this category are for activities performed, or to be performed, by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions, and private individuals. Included as out-of-house work are all expenses paid the out-of-house performers, as well as the expenses incurred in planning and administering these programs by personnel of the organizational entity. This would also include travel and other supporting services.

9. *Annual Operating Cost*--This should generally reflect the overhead cost of operating the laboratory or facility. It should include such things as costs of utilities, rents, janitorial services, guard and fire protection, support services such as supply personnel, printing, maintenance of buildings and grounds, etc. It should not include the salaries of direct labor personnel such as scientists, engineers, technicians, draftsmen, machinists, etc.

## APPENDIX III

### Selected Standard Abbreviations and Acronyms

AAM -- air-to-air missile	GCA -- ground-controlled approach
AAW -- anti-air warfare	HF -- high-frequency
ADPE -- automatic data-processing equipment	IFF -- identification, friend or foe
AEC -- Atomic Energy Commission	IR -- infrared
AEDC -- Arnold Engineering Development Center	MPT -- military potential test
AFMDC -- Air Force Missile Development Center	NAF -- Naval Air Facility
AFSC -- Air Force Systems Command	NASA -- National Aeronautics and Space Administration
AFWET -- Air Force weapons effectiveness testing	NASC -- Naval Air Systems Command
AMC -- Army Materiel Command	NAVORD -- Naval Ordnance Systems Command
APG -- Aberdeen Proving Ground	NAVSHIP -- Naval Ship Systems Command
ARPA -- Advanced Research Projects Agency	NEMP -- nuclear electromagnetic propagation
ASW -- antisubmarine warfare	
AUS -- Army, United States	PI -- product improvement
	POL -- petroleum, oil, lubricants
BIS -- Board of Inspection and Survey	QA -- quality assurance
BW -- biological warfare	QMDO -- qualitative materiel development objective
CBR -- chemical, biological, radiological	QMR -- qualitative materiel requirement
CE -- Chief of Engineers, Army	RDT&E -- research, development, test and evaluation
CG -- commanding general	RF -- radio frequency
CNO -- Chief of Naval Operations	RV -- reentry vehicle
COMEL -- communications electronics	
DA -- Department of the Army	SATS -- short airfield tactical support
DASA -- Defense Atomic Support Agency	SDR -- small development requirement
DoD -- Department of Defense	SI -- ship installation
DZ -- drop zone	SP -- self-propelled
ECM -- electronic countermeasures	ST -- service test
ECOM -- Electronics Command, Army	
ED -- engineering development	T&E -- test and evaluation
EDT -- engineering development and test	TOTO -- Tongue-of-the-Ocean
EEG -- electroencephalogram	
EKG -- electrocardiogram	UDT -- underwater demolition team
ELINT -- electronic intelligence	ULMS -- Undersea Long-Range Missile System
EMP -- electromagnetic propagation	USATECOM -- U. S. Army Test and Evaluation Command
EMW -- electromagnetic warfare	UTTAS -- utility tactical transport aircraft system
EODC -- Explosive Ordnance Disposal Center	USW -- undersea warfare
ET -- engineering test	UV -- ultraviolet
EW -- electronic warfare	
FA -- field artillery	V/STOL -- vertical/short takeoff and landing
FBM -- fleet ballistic missile	